

# AUTHOR INDEX

- A
- Abbott, C. R., 392  
 Abdul, B., 259, 266  
 Abe, K., 304  
 Abel, C. A., 285, 287  
 Abernathy, R. E., 272  
 Abeyounis, C. J., 6  
 Abidakov, J. A., 49, 50  
 Abraham, J. M., 343, 344  
 Abrams, G. D., 123  
 Absher, M., 28, 37  
 Abu Haydar, N., 155  
 Accinni, L., 7  
 Aceto, T., Jr., 231  
 Achord, J. L., 349  
 Ackermann, V., 89  
 Acosta, P. B., 337, 339  
 Adams, A., 380, 383, 388, 389, 390, 391, 392, 399  
 Adams, B., 151  
 Adams, D. A., 259  
 Adams, H. R., 173  
 Adams, S. S., 105  
 Adamson, J. W., 158, 159, 173  
 Adamson, R. H., 37, 434, 437, 438, 441  
 Adinolfi, M., 293  
 Adler, H. E., 183  
 Adler, R. H., 282, 288, 289, 290, 291  
 Aeberhard, E., 339  
 Agarwal, D. S., 107  
 Agnello, V., 13  
 Aguilar, J., 346  
 Ahmed, J., 259, 266  
 Ahrens, E. H., Jr., 241  
 Aikat, B. K., 399  
 Aiken, B. S., 122  
 Aimbender, E., 293  
 Aisenberg, A. C., 124  
 Akao, S., 210  
 Akerblom, H. K., 231  
 Akers, T. G., 30  
 Akinashina, G. T., 211  
 Akman, L. C., 272  
 Akstein, E., 380  
 Al-Askari, S., 4  
 Albrecht, M., 319  
 Aicini, E., 396, 398  
 Aldo, P. T., 51  
 Aleu, F., 183, 184  
 Alexander, J. A., 51  
 Alexander, L., 138  
 Alexander, M., 202  
 Alexander, N. M., 439  
 Alford, C. A., 205, 206  
 Alfrey, A. C., 229  
 Alfrey, C. P., 140  
 Alison, F., 201  
 Allan, F., 102  
 Allan, J. D., 341  
 Allan, N., 172, 173  
 Allanby, K. D., 141  
 Allen, E. W., 234  
 Allen, J. C., 106  
 Allgood, J. W., 151  
 Allison, F., Jr., 111, 125  
 Allison, S. P., 226, 227  
 Almogela, E., 307  
 Alousi, M. A., 6  
 Alper, C. A., 11, 12  
 Alperin, J. B., 161, 162  
 Altenbern, R., 434  
 Alter, A., 385  
 Alvord, E. C., Jr., 105  
 Alvsaker, J. O., 359  
 Amaransingham, R., 53  
 Amato, J. J., 301  
 Ambrose-Thomas, P., 204  
 Ambrus, J., 59  
 Ameraal, R. N., 435  
 Amerson, J. R., 313  
 Amiel, J. L., 437  
 Ammann, A. J., 206, 284  
 Andelman, R. J., 335, 347  
 Anderson, C. M., 102  
 Anderson, J. A., 339, 340  
 Anderson, J. C., 300  
 Anderson, M. E., 172  
 Anderson, R. E., 105  
 Ando, T., 343, 346  
 Andrae, U., 330, 331  
 Andreini, P. H., 363  
 Andres, G. A., 4, 7, 9, 10  
 Andrae, R., 248  
 Andre-Schwartz, J., 9  
 Andrews, A., 438  
 Andriole, V. T., 362  
 Angers, M., 78, 79, 86  
 Anschütz, F., 394  
 Anthone, R., 6  
 Antonini, E., 159, 173  
 Antonovych, T. T., 11  
 Antunes, L. J., 292  
 Aoki, N., 13  
 Aoki, S., 166  
 Aoki, T., 7  
 Appelmans, F., 121  
 Aprill, C. N., 234  
 Aquilar-Parada, E., 224  
 Arai, Y., 307  
 Arakawa, T., 344, 347, 349  
 Arbesman, C. E., 187, 195, 284  
 Archer, G. T., 114  
 Archer, J. F., 203  
 Archer, J. M., 106, 119  
 Arendt, E. C., 245  
 Arky, R. A., 227, 253  
 Armstrong, D., 67, 68, 69, 70, 71, 72, 329  
 Armstrong, J. A., 25, 34  
 Armstrong, M. Y. K., 9  
 Aronson, W. J., 202  
 Arseneau, J., 439  
 Arstein, M. S., 292, 293  
 Arthur, A. B., 336  
 Arthur, R. P., 67, 68  
 Arundell, P., 64  
 Arvidsson, U. B., 153  
 Asboe-Hansen, G., 106  
 Aschheim, E., 109  
 Asero, B., 301  
 Aseron, C., 3  
 Ashmore, J., 226, 231, 311  
 Ashworth, C. T., 8  
 Askonas, B. A., 117  
 Asofsky, R., 214, 289, 292  
 Asquith, P., 384  
 Assan, R., 229, 252, 253, 307  
 Assaykeen, T. A., 86  
 Astaldi, A. A., 441  
 Astaldi, G., 441  
 Astwood, E. B., 253  
 Atchison, R. W., 34  
 Athens, J. W., 106, 107  
 Atkin, N. B., 392, 396, 397, 398, 399  
 Atkins, L., 390  
 Atkinson, R. M., 372  
 Auerbach, V. H., 343, 346  
 Auersberg, N., 396, 397, 398  
 August, J. T., 76  
 Aul, P., 184  
 Aur, R. J. A., 438  
 Austen, K. F., 10, 11, 12, 13, 122, 196  
 Austen, W. G., 51  
 Austin, J., 323, 328, 329  
 Aviad, J., 340  
 Avigan, J., 338, 339  
 Avrameas, S., 189

- Awa, A. A., 380, 389, 391, 399  
 Awadaguchi, S., 210  
 Axelrad, A. A., 379  
 Axelsson, H., 284  
 Ayers, C. R., 276  
 Ayllon-Leindl, L., 204  
 Ayoub, E. M., 182  
 Ayres, S. M., 55  
 Azuma, M., 27  
 Azzopardi, J. G., 140
- B
- Baastrup, P. C., 372  
 Bacani, R. A., 9  
 Bachhawat, B., 323, 329  
 Bachmann, F., 162, 209  
 Bachynaky, N., 434, 435, 436  
 Back, F., 384  
 Badenoch, J., 147, 153  
 Baekken, T., 111  
 Bagdade, J. D., 219-40; 220, 221, 223, 228, 229, 230, 233, 249  
 Baglioni, C., 172  
 Bahlmann, J., 89, 92  
 Balkie, A. G., 379, 380, 381, 382, 383, 384, 385, 389, 390, 391, 392, 394, 399  
 Bain, J. A., 345  
 Bain, W. A., 67, 105  
 Baines, A., 91  
 Baird, I. M., 252  
 Bakay, M., 16, 19  
 Baker, L., 227, 337  
 Baker, L. A., 19  
 Baker, L. R. I., 137, 139, 140, 141  
 Baker, M. C., 392, 396, 397, 398, 399  
 Baker, R. J., 301  
 Bakken, C. L., 140  
 Balasubramanian, A., 323  
 Balazs, E. A., 114  
 Balcerzak, S. P., 147  
 Balcon, R., 55  
 Baldus, W. P., 275  
 Balduzzi, P., 138  
 Baldwin, D. S., 4, 10  
 Balfe, J. W., 103, 104  
 Baliga, B. S., 435  
 Balis, M. E., 348, 434, 435, 436, 440  
 Baltzan, M. A., 248  
 Bank, A., 380, 386, 390  
 Bank, S., 232  
 Banks, G. T., 18, 19  
 Bannerman, R. M., 150, 164  
 Bannister, G. L., 203  
 Barban, S., 33  
 Barber, G. W., 341, 342  
 Barboriak, J. J., 225
- Barbour, B. H., 79  
 Barger, A. C., 84, 271, 272  
 Barick, J., 10  
 Barile, M. F., 180  
 Barker, B., 224, 307  
 Barker, H. G., 102  
 Barkham, D. W., 79, 82, 91  
 Barlotta, F. M., 209  
 Barnard, E. A., 114  
 Barnard, P. J., 137, 138  
 Barnes, L. A., 343, 346  
 Barnett, E. V., 105  
 Barnhart, M. I., 105, 109, 357  
 Baron, S., 17, 18, 19, 20, 25, 29, 30, 31, 32, 33, 34, 35, 36, 37  
 Barracough, M. A., 77, 91, 93  
 Barry, J. M., 435  
 Barry, K. G., 229  
 Bartels, H., 149  
 Bartelt, K. M., 243  
 Barton, M. A., 300  
 Bartter, F. C., 77, 78, 79, 83, 85, 86, 87, 93, 259, 260, 232, 264, 265, 270, 274, 276  
 Baserga, A., 392  
 Basilico, C., 322  
 Bassett, A. L., 51  
 Bastenie, P. A., 225  
 Basu, D., 323  
 Basu, S., 330  
 Bates, C. J., 438  
 Bates, R. C., 7  
 Battaglia, F. C., 162  
 Battifora, H. A., 3  
 Baudelot, J., 201  
 Bauer, W., 360  
 Bauke, J., 384, 399  
 Baum, D., 227  
 Baumber, J. S., 272, 273  
 Baumeister, A. A., 340, 341  
 Bäumler, A., 390, 399  
 Baumslag, N., 153  
 Baur, E. W., 173  
 Bauser, G. H., 18, 20, 21, 22, 25  
 Bayless, T. M., 336  
 Bayliss, N. L., 23  
 Bayliss, W. M., 299  
 Bayreuther, K., 379  
 Bazin, S., 105  
 Beale, D., 159, 161, 167, 172, 173  
 Beamish, P., 367, 369, 370  
 Bean, M. A., 122  
 Bearn, A. G., 103, 104, 399  
 Beattie, C. P., 201
- Beaudouin, A., 138  
 Beauregard, M., 203  
 Beaven, G. H., 166  
 Beckak, M. L., 390  
 Beckak, W., 390  
 Becher, B., 121  
 Beck, C. S., 49  
 Beck, E. A., 135  
 Beck, J. C., 224, 225, 226, 301, 307, 308, 309, 310, 311  
 Beck, P., 230, 231, 243, 251  
 Becker, E. L., 13, 111, 118  
 Becker, F. F., 435  
 Becker, S., 399  
 Becroft, D. M. O., 345  
 Behrman, R. E., 395  
 Beier, F. R., 395  
 Beladi, I., 18, 19  
 Beldotti, L., 9  
 Belisario, J. C., 62  
 Bell, W. N., 172  
 Bell, W. R., 385  
 Bellanti, J. A., 11, 288, 292, 293, 294  
 Beller, F. K., 140  
 Bellingham, A. J., 156, 161, 162, 163, 167, 171, 172, 173  
 Benacerraf, B., 4, 120  
 Benchimol, A., 54  
 Benchoff, B. M., 204  
 Bendixen, G., 4  
 Benedetti, A., 233, 243  
 Benedict, F. G., 254  
 Benedict, W. F., 397  
 Benesch, R., 169, 172, 174  
 Benesch, R. E., 169, 172, 174  
 Benirschke, K., 396, 399  
 Benjamin, B. I., 146  
 Benjamin, F. B., 69  
 Benke, P., 348  
 Bennett, C. M., 87, 90, 92, 94  
 Bennett, J. M., 383, 390  
 Bennett, L. L., 221, 223  
 Bennich, H., 191, 192, 195, 197, 198, 199, 284  
 Benoit, F. L., 3, 10, 228, 253  
 Ben-Porat, F., 161  
 Bensach, K. G., 8, 363, 364  
 Bentley, P. H., 300, 313  
 Benton, J. W., Jr., 205, 206  
 Bentovim, A., 341  
 Bentzel, C., 292  
 Bernaldo, W. T., 72  
 Berde, B., 262  
 Berendes, H., 124

# AUTHOR INDEX

447

- Berenson, M. P., 161  
 Beretta, A., 161  
 Bergendi, L., 201  
 Berger, J. E., 301  
 Berger, R., 293, 379, 395, 396  
 Bergin, J. W., 384  
 Berk, P. D., 347  
 Berkovich, S., 7  
 Berliner, R. W., 82, 87, 88, 90, 92, 94, 265, 270, 271  
 Berman, J. L., 339, 340  
 Berman, L., 31, 32  
 Berman, P. H., 348  
 Berman, P. W., 340  
 Bernadou, A., 399  
 Bernard, D., 140  
 Bernard, J., 138, 209  
 Berne, R. M., 270  
 Bernheim, M., 138  
 Bernheimer, A. W., 121  
 Bernini, L. F., 163  
 Bernstein, D., 362  
 Bernstein, R. E., 337, 338  
 Bernstock, L., 141  
 Berry, C. L., 120  
 Berry, E. W., 383, 390  
 Berry, H. K., 339, 340  
 Berson, S. A., 233, 243, 251  
 Bertaccini, A., 301  
 Bertelli, A., 105  
 Bertha, J., 113  
 Bertino, J. R., 433-44; 434, 436, 437, 438, 440, 441  
 Bertrand, J., 138  
 Besser, C. M., 304  
 Bessman, S. P., 339, 340  
 Bethenod, M., 138  
 Bethune, H. C., 371  
 Bethune, J. E., 232, 259, 267  
 Betke, K., 162, 163, 164  
 Bettigole, R. E., 439  
 Beunders, B. J. W., 204  
 Beutler, E., 150  
 Beverley, J. K. A., 203  
 Bhatt, K. G., 111, 112  
 Bhoola, K. D., 71  
 Bhussary, B. F., 106  
 Bhuyan, B. K., 31, 32  
 Bianchine, J. R., 112  
 Bianco, I., 161  
 Bianu, G., 380  
 Bidd, G. C., 114  
 Bienenstock, J., 261, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295  
 Bierman, E. L., 220, 221, 223, 228, 229, 230, 232, 233, 249  
 Bierme, R., 163, 173  
 Bigger, J. T., Jr., 51, 52  
 Biggs, J. C., 147, 154  
 Biglieri, E. G., 79, 83, 85, 87, 93  
 Bille, M., 368  
 Billiau, A., 18, 20, 24, 25, 26, 28, 31, 32, 35  
 Bilski-Pasquier, G., 382, 384, 385, 387, 398  
 Binnion, P. F., 270, 272  
 Birbeck, M. S. C., 394  
 Birch, H. G., 339  
 Birck, S. A., 230  
 Birkenhagen, J. C., 256  
 Bitro, C. E., 399  
 Bitron, P., 78, 79  
 Birt, A. R., 114  
 Birtch, A. G., 84, 271  
 Bishop, J. E., 123  
 Bistany, T., 292  
 Bisterri, A., 55  
 Bittensky, M. W., 183, 184  
 Black, D. A. K., 14  
 Black, J. A., 338  
 Black, P. H., 31, 32  
 Blackard, W. G., 226, 234, 310  
 Blacket, R. B., 275  
 Blackman, J. R., 52  
 Blair, A., 337  
 Blair-West, J. R., 79  
 Blaisdell, R. K., 390, 394  
 Blaker, R. G., 211, 213  
 Blanc, B., 284  
 Blanc, W. A., 289, 290  
 Blanchard, H., 345  
 Blankenship, W. J., 205, 206  
 Blašković, D., 18  
 Blattberg, B., 111, 112, 113  
 Blattner, R. J., 395  
 Bleicher, S. J., 227  
 Bleisch, V. R., 272  
 Blenkinsopp, W. K., 114  
 Bloch, K. J., 122  
 Block, J. B., 381, 437, 438, 439, 440, 441  
 Bloom, D., 395  
 Bloom, G. D., 113, 114  
 Bloom, G. E., 381, 394  
 Bloomfield, M., 211  
 Blount, S. G., Jr., 56  
 Bluhm, G. B., 357, 364  
 Blumen, D., 262  
 Blythe, W. B., 87  
 Bobowski, S. J., 211  
 Bocci, V., 35  
 Boch, D., 434  
 Bockelmann, W., 380  
 Bodansky, M., 300  
 Boddington, M. M., 399  
 Bodel, P. T., 363  
 Boden, G., 233  
 Bodenbender, J. G., 125  
 Bodey, G. P., 105-32; 437, 438, 439, 440, 441  
 Bodian, M. L., 100  
 Boellner, S. W., 336, 338  
 Boesman, M., 191  
 Boesman, M. I., 285  
 Boggs, D. E., 339  
 Boggs, D. R., 106, 107, 123  
 Bogomolova, N. N., 18, 20  
 Boigné, J. M., 161, 163, 173  
 Boiron, M., 31, 32, 140, 209  
 Bokisch, V. A., 10, 118  
 Bolinger, R. E., 243, 256  
 Boll, I., 380, 386, 390  
 Bonanni, R., 30  
 Bonaventura, J., 159, 160, 172  
 Bond, D., 372  
 Bond, V. P., 117  
 Bonney, G. L. W., 69  
 Boon, W. H., 173  
 Borecky, L., 18, 27  
 Borek, C., 332  
 Borek, E., 435  
 Borel, J. R., 116  
 Borgers, W. H., 380, 386, 390  
 Borisy, G. G., 363  
 Borman, I., 181  
 Borsos, T., 197  
 Bortz, W. M., 256  
 Boshell, B. R., 243, 244, 245, 250, 253  
 Boshwitz, C., 181  
 Bosi, L., 399  
 Bostandzhyan, M. G., 33  
 Botha, M. C., 159  
 Bothwell, T. H., 145-56; 146, 147, 148, 149, 150, 151, 152, 153, 154, 155  
 Botura, C., 388, 389, 399  
 Bougas, J., 274  
 Boulanger, P., 203  
 Bound, J. K., 348  
 Bourali, C., 30, 31, 32, 36  
 Bourne, H. R., 375  
 Bouroncle, B. S., 390  
 Bousser, J., 382, 384, 385, 387  
 Bover, G. F., 380, 386, 390  
 Bovert, Th., 379  
 Bowen, E. H., 273  
 Bowen, P., 380, 386, 394  
 Bowey, C. E., 396  
 Bowman, B. H., 103, 104  
 Bowman, B. J., 106  
 Boxaca, M., 17, 27  
 Boyd, E., 383

- Boyden, S., 115, 117, 118  
 Boyer, S. M., 336  
 Boyle, J. A., 231  
 Boyns, D. R., 225  
 Boyse, E. A., 434, 435, 436, 437, 438, 439, 440, 441  
 Bozdech, V., 204  
 Bradford, A. C., 59  
 Bradham, R. R., 272  
 Bradley, R. M., 319, 327, 328, 332  
 Bradley, T. B., 161, 163  
 Bradshaw, D. L., 364  
 Brady, R. O., 317-34; 317, 319, 320, 321, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332  
 Bralanti, T., 301  
 Bralovsky, C., 34  
 Brain, M. C., 133-44; 133, 134, 135, 136, 137, 138, 139, 140, 141, 166  
 Brandborg, L. L., 328  
 Brandt, I. K., 340  
 Brandt, J., 37  
 Brandt, N. S., 161  
 Brandtzaeg, P., 283, 284, 287, 288, 289, 291, 293  
 Brannon, E. S., 274  
 Braun, D. G., 289, 290  
 Braun, W., 28  
 Braunsteiner, H., 379, 399  
 Braunwald, E., 270, 274  
 Braverman, L. E., 227  
 Brechner, G., 380, 381  
 Breckenridge, R. T., 71  
 Breed, E. S., 274  
 Bregant, R., 222  
 Breinig, M. K., 24, 25  
 Brennan, C., 342  
 Brenner, B. M., 87, 90, 92, 94, 271  
 Brettschneider, L., 345  
 Brezina, R., 18  
 Briggs, J. D., 229  
 Brill, G. C., 78  
 Brill, J. M., 358  
 Brimhall, B., 158, 159, 161, 162, 163, 173  
 Brimley, P. M., 212  
 Brimori, M., 159  
 Brine, K. L., 116, 119  
 Briscoe, H. F., 125  
 Brittin, G. M., 390  
 Broadbent, J. L., 67, 105  
 Brocklehurst, W. E., 195  
 Brod, J., 274  
 Brofman, B. L., 49  
 Brommer, E. J. P., 394  
 Brooks, F. P., 301, 310  
 Brooks, W. H., 204  
 Broome, J. D., 433, 434, 435, 436, 437  
 Bross, I. D. J., 388, 389, 397  
 Brouillet, J., 78, 79  
 Broustet, A., 399  
 Brown, B. I., 345  
 Brown, C., 342  
 Brown, C. D., 397  
 Brown, E. B., 151  
 Brown, E. B., Jr., 146  
 Brown, G. A., 252  
 Brown, J., 245  
 Brown, J. C., 306  
 Brown, J. H., 105  
 Brown, J. J., 81, 82, 83, 84, 91  
 Brown, J. K., 341  
 Brown, R. S., 122  
 Brown, R. W., 243  
 Brown, T. C., 270, 272  
 Brownhill, L., 399  
 Brownlee, L., 18, 205, 206, 212  
 Brunner, F. P., 90  
 Brunzell, J. D., 232  
 Brusilow, S. W., 99-104  
 Bryson, M. F., 344  
 Bucci, E., 159  
 Buchan, A., 22  
 Buchanan, K. D., 227, 229, 231, 311  
 Buchanan, W. W., 231  
 Buck, K. W., 18, 19  
 Buck, R. C., 332  
 Buckford, A. A., 211  
 Buckler, C. E., 18, 19, 20, 25, 30, 33, 34, 35  
 Buckley, I. K., 108  
 Bucknall, R. A., 27  
 Buckton, K. E., 380, 381, 384  
 Budd, M. A., 344  
 Buergi, W., 343, 344  
 Buescher, E. L., 292, 293, 294  
 Bull, B. S., 135, 136  
 Bull, D. M., 289, 291  
 Bunag, R. D., 82  
 Bunney, W. E., Jr., 375  
 Burbach, J. P. E., 106  
 Burch, G. E., 8, 70  
 Burchenal, J. H., 437, 438  
 Burchkhardt, D., 112  
 Burck, P. J., 434, 435  
 Burde, D. C., 17, 22, 23  
 Burdette, W. J., 379  
 Burg, M. B., 271  
 Burgert, E. O., 162  
 Burgess, E. A., 343, 344  
 Burgess, F., 373  
 Burgess, J. A., 224, 226, 231, 250  
 Burgio, G. R., 441  
 Bürk, R. R., 322  
 Burke, E. C., 8, 138  
 Burke, J. S., 122  
 Burmeister, P., 383, 394  
 Burnett, C. H., 350  
 Burnett, J. W., 64  
 Burns, T. W., 222  
 Burnside, J., 19  
 Burnstein, T., 211  
 Burrell, R. H., 371  
 Burson, G., 434  
 Burt, C. G., 371  
 Burwell, L. R., 79  
 Burwell, R. B., 79  
 Burwell, R. G., 117  
 Bütkofer, E., 164  
 Butler, J. E., 292  
 Butler, W. T., 283, 284, 289, 290, 293  
 Buttenwieser, E., 150  
 Butterfield, W. J., 229, 245, 246  
 Buzin, H., 293  
 Bybee, J. D., 125  
 Byers, P. H., 362
- C
- Cabannes, R., 163, 173  
 Cacciaguada, R. J., 271  
 Cade, J. F. J., 371  
 Cader, G., 248  
 Caesar, J., 275  
 Cahill, G. F., Jr., 220, 249, 250, 254, 255, 256  
 Cailleau, R., 381  
 Calcagno, P. L., 11  
 Calder, M. W., 4, 9, 10  
 Caldwell, I. C., 348  
 Calle, J. D., 71  
 Callender, S., 151, 153  
 Calne, R., 141  
 Calvanico, N., 287  
 Camarzo, M. E., 204  
 Came, P. E., 18, 20  
 Campbell, H. A., 434, 435, 437, 439, 441  
 Campbell, J. B., 35  
 Campbell, L., 434  
 Campbell, S., 138  
 Camps, F. E., 374, 375  
 Candela, R. B., 380, 386, 390  
 Canellos, G. P., 380, 381, 383, 384, 387, 436, 437, 438, 439, 440, 441  
 Caner, J. E. Z., 363  
 Canivet, M., 31, 32  
 Cantagalli, P., 18, 20, 25, 35  
 Cantell, K., 23, 29, 37  
 Cantu, J. M., 384, 387  
 Capella, C., 312  
 Capelli, J. P., 139  
 Capizzi, R. L., 433-44; 434, 436, 437, 438, 439, 440, 441



- Caplinger, K. T., 336, 338  
 Caputo, A., 173  
 Carbonara, A. O., 282, 289  
 Carbone, P. P., 209, 380, 381, 383, 384, 385, 387, 437, 438, 439, 440, 441  
 Carey, M., 341, 342  
 Carlson, K. L., 230  
 Carmichael, D. S., 141  
 Caroline, N. L., 17, 31, 36  
 Carpenter, C. B., 1-16; 11, 12, 13  
 Carpenter, C. C. J., 270  
 Carr, A. A., 79, 270  
 Carr, R. I., 13  
 Carré, I. J., 138, 342  
 Carrell, R. W., 157, 161, 162, 166, 171  
 Carson, N. A. J., 342  
 Carson, P., 54  
 Carswell, F., 85  
 Carta, S., 159  
 Carter, C. O., 395  
 Carter, N. W., 8  
 Carter, W. A., 33  
 Cartwright, G. E., 106, 107  
 Carver, D. H., 22, 25  
 Carver, R. K., 203  
 Casazza, A. R., 209  
 Case, R. W., 61  
 Casey, J. F., 372, 373  
 Casey, T. H., 140  
 Casley-Smith, J. R., 110  
 Casper, A. G. T., 79, 85, 86, 270  
 Cass, V. M., 339, 340  
 Cassady, G., 205, 206  
 Cassi, E., 209  
 Cassidy, W. L., 367, 369  
 Castany, R. J., 49  
 Castells, S., 340  
 Castoldi, G. L., 380, 386, 392, 399  
 Catanzano, G., 399  
 Catar, G., 201  
 Cate, T. R., 34, 35, 293  
 Cathcart, R., 171  
 Cathie, I. A. B., 162, 167  
 Cattani, A., 437  
 Caughey, D. E., 55  
 Cavanaugh, E., 209  
 Cebrá, J. J., 287, 292  
 Cederblad, G., 285  
 Cellier, K. M., 398  
 Celeus, A. C., 105  
 Cerasi, E., 231, 233  
 Cerletty, J. M., 229  
 Chadwick, J. A., 138  
 Chain, E. B., 18, 19  
 Chakravarty, N., 114  
 Chaloner, D. R., 311  
 Chalmers, T. M., 232  
 Chalquest, R. R., 181  
 Chamberlain, M. J., 226, 227  
 Chamberlin, M. J., 18, 20, 21  
 Chan, W. H., 64  
 Chance, G. W., 252  
 Chance, R. E., 245  
 Chandalia, H. B., 245  
 Chandler, J. P., 276  
 Chandra, R. K., 124, 336  
 Chang, P. K., 438  
 Chang, S.-S., 24  
 Chang, Y.-H., 71, 361  
 Chanock, R. M., 180, 184, 288, 293  
 Chanutin, A., 169  
 Chany, C., 23, 26, 34, 37  
 Chao, P. Y., 70  
 Chaplin, H., Jr., 139  
 Chaptal, J., 137  
 Charache, S., 159, 161  
 Chargaft, E., 319  
 Charley, P. J., 146  
 Charlton, R. W., 145-56; 146, 147, 148, 149, 150, 151, 152, 153, 154  
 Chasson, A., 284  
 Cheever, A. W., 209  
 Chen, J., 18, 20  
 Chernay, P. R., 390  
 Chernyakhovskaya, I. Ju., 28  
 Cherry, J. D., 206  
 Chessin, L. N., 19  
 Chew, B. K., 439  
 Chiandussi, L., 275  
 Childsey, C. A., 270, 274  
 Childs, B., 335  
 Childgren, R. A., 293  
 Chin, T. D. Y., 34  
 Chinard, F. P., 276, 277  
 Chirigos, M. A., 31, 32  
 Chisholm, D. J., 225, 226, 303, 304, 305, 309  
 Cho, S., 219, 245, 303  
 Choi, N. W., 211  
 Chowars, I., 227  
 Christensen, L. K., 52  
 Christensen, N. J., 222  
 Christenson, W. N., 201  
 Christian, C. L., 5, 138  
 Christopher, N. L., 338  
 Chu, E. W., 399  
 Chu, K. C., 8  
 Chu, P. C., 235  
 Ciarlina, E., 204  
 Cirkasna, W. J., 82, 87, 265, 270  
 Cirri, G., 35  
 Claessen, M., 18, 20, 25, 31, 32  
 Claman, H. N., 282, 289  
 Clapham, W. F., 75, 87, 88, 89, 92  
 Clark, D. S., 11  
 Clark, L. G., 292  
 Clark, P., 147, 152  
 Clark, W. R., 31, 36  
 Clarkson, B. D., 434, 435, 437, 438, 439, 441  
 Clauss, R. H., 274  
 Clawson, C. C., 124  
 Clayton, B. E., 336, 340  
 Clayton, P., 367, 368, 370  
 Clegg, J. B., 157, 159, 163, 165, 173  
 Cleghorn, R. A., 375  
 Clein, G. P., 381, 399  
 Cleland, J. B., 72  
 Clément, R., 138  
 Clementi, A., 433, 434  
 Cleton, F., 147  
 Clever, L., 28  
 Cliff, W. J., 120  
 Clifford, G. O., 439  
 Clifford, P., 399  
 Cline, J. C., 18, 19  
 Cline, M. J., 112  
 Cline, R. E., 49  
 Close, H. P., 171  
 Clyde, W. A., Jr., 180, 183  
 Cobb, R., 105  
 Cocchiara, J. C., 226, 310  
 Cochran, B., 223  
 Cochran, C., 370  
 Cochran, C. G., 4, 5, 10, 11, 105, 106, 115, 118, 119, 121, 122  
 Cochran, W., 440  
 Cocito, C., 18  
 Cöers, C., 209  
 Coghlan, J. P., 79  
 Cohen, B. E., 340  
 Cohen, M. E., 367, 369  
 Cohen, P., 260  
 Cohen, R. J., 146  
 Cohen, S., 209  
 Cohen, S. G., 117  
 Cohen, S. M., 380, 386, 394  
 Cohn, J. N., 275, 276  
 Cohn, K. E., 47-58; 51  
 Cohn, Z. A., 105, 321  
 Colburn, R. W., 375  
 Colby, C., 18, 20, 21, 23  
 Cole, C., 103, 104  
 Cole, J. D., 370  
 Cole, M. B., 111, 112  
 Cole, W. R., 272, 276  
 Coleman, R. D., 159  
 Collins, A., 347  
 Colombes, P., 392  
 Colombo, J. P., 343, 344  
 Collier, J. S., 35

- Colwell, J. A., 233  
 Comalsh, J. S., 105, 113  
 Comalsh, S., 65  
 Combes, B., 19  
 Conen, P. E., 379, 384, 385,  
 388, 390, 392, 395  
 Conn, H. L., Jr., 49,  
 50  
 Conn, J. W., 223, 224, 225,  
 231, 233, 234, 250, 252,  
 307  
 Conn, R. D., 51, 52  
 Connelly, J. F., 343, 344  
 Connolly, S. C., 209  
 Conrad, M. E., 146, 149,  
 150, 154, 384  
 Conrad, V., 307  
 Considine, R. G., 25  
 Conway, M. J., 235  
 Cook, C. D., 102  
 Cook, J. D., 148, 152  
 Cooke, A. R., 300, 304  
 Cooner, A. E., 276  
 Conney, D. A., 434, 436,  
 437, 439, 440  
 Cooper, H. L., 18  
 Cooper, J. R., 346  
 Cooper, M. D., 287, 289  
 Cooperband, S. R., 18, 27,  
 28  
 Coore, H. G., 307, 310  
 Coote, J. H., 79  
 Cope, W. A., 124  
 Coplaschi, G., 252  
 Copley, A. L., 109  
 Coppage, W. S., Jr., 276  
 Coppen, A. J., 374, 375,  
 376  
 Copperman, R., 184  
 Coppey, J., 31, 32, 35,  
 36  
 Cordy, D. R., 183  
 Corey, M. J., 396, 397,  
 398  
 Corfman, P. A., 396  
 Cormia, F. E., 70  
 Cornblath, M., 337, 338,  
 345  
 Cornely, H. P., 115, 122  
 Cornet, A., 203  
 Cornet, J., 434  
 Cornfield, J., 307  
 Cortell, S., 146  
 Cortner, J., 390  
 Courtney, M. A., 81  
 Costain, R., 374  
 Costea, N., 285, 286,  
 290  
 Costeff, H., 340  
 Costrini, N. V., 230  
 Cotran, R. S., 106, 110  
 Cottom, D., 344  
 Cotzias, G. C., 276,  
 277  
 Couch, R. B., 34, 35, 184,  
 283  
 Coulson, E. J., 292  
 Court-Brown, W. M., 380,  
 381, 382, 383, 384, 392,  
 394  
 Couvreur, J., 201, 206  
 Coveill, J. W., 273, 274,  
 275  
 Cowen, D., 209  
 Cowling, D. C., 383  
 Cox, C., 54  
 Cox, D., 397  
 Cox, J. M., 168, 169  
 Cox, R. A., 17  
 Crabb, E. D., 114  
 Crabbé, J., 77  
 Crabbé, P. A., 284, 289,  
 290, 291, 293  
 Craddock, C. G., 394  
 Craig, G. M., 89, 90,  
 92  
 Craig, J. W., 335, 349  
 Crane, N. A., 227  
 Cranefield, P. F., 48, 49,  
 51, 52  
 Craver, L. F., 124  
 Crawford, J. D., 344  
 Crawford, L. E., 341,  
 342  
 Crawford, M., 381  
 Creamer, B., 78  
 Creasey, W. A., 363, 434,  
 436, 437, 438, 439, 440,  
 441  
 Cress, H., 103, 104  
 Crippa, L. P., 394  
 Crocker, A. C., 324,  
 325  
 Crockford, P. M., 224, 225,  
 233, 243  
 Cronkite, E. P., 149  
 Crookston, J. H., 161, 173,  
 384, 385, 392  
 Crosby, B., 125  
 Crosby, W. H., 146, 148,  
 149, 150, 154, 380, 386  
 Crosswhite, L. H., 380, 381,  
 383, 388, 389, 390, 391,  
 392, 394, 399  
 Crosthwaite, J. L., 111  
 Crougns, W., 252  
 Crowley, J. H., 106, 107,  
 120  
 Crowther, R. A., 170  
 Cruse, V., 137  
 Culbertson, C. G., 19  
 Culpian, R. H., 371  
 Cunningham, D., 245  
 Cunningham, G. C., 339,  
 340  
 Cuppage, F., 6  
 Curnen, E. C., 185  
 Curnish, R. R., 169  
 Curry, D. L., 221, 223  
 Curry, L., 348  
 Curtis, J. D., 224, 225,  
 226, 301, 308, 309, 310,  
 311  
 Cusworth, D. C., 335,  
 341, 342  
 Cutler, J. L., 28  
 Cutler, R., 259, 260, 261,  
 266, 267  
 Cuypers, Y., 89  
 Czaczkes, J. W., 259, 266,  
 267  
 Czerwinski, D. S., 285,  
 287  
 D  
 Dacie, J. V., 133, 135, 136,  
 137, 138, 139, 140, 141,  
 162, 164, 166  
 Dacremont, G., 329  
 Dahlquist, A., 337  
 Dajani, A. S., 182  
 Dalaunay, A., 105  
 D'Albora, J. B., 11  
 Dalton, A. J., 117  
 Damato, A. N., 49, 52  
 Dameshek, W., 141, 380, 381,  
 385, 386, 388, 389, 390,  
 391, 392, 394, 395  
 Dammin, G. J., 9  
 Dancis, J., 344, 348  
 Dances, A. S., 103, 104  
 Daniela, E. G., 77, 88  
 Daniela, J. R., 122  
 Danon, F., 287  
 Darbyshire, J. E., 18,  
 19  
 Daria, G., 434  
 Darling, R. C., 180  
 Darzynkiewicz, Z., 114  
 Das, K. C., 399  
 Daughaday, W. H., 230, 231,  
 243, 251  
 David, J. R., 4, 116  
 Davidson, M., 182, 183  
 Davidson, M. B., 230  
 Davidson, P. L., 275  
 Davidson, W., 340, 341  
 Davies, D. L., 81, 82, 83,  
 84, 91  
 Davies, D. R., 169  
 Davies, J. P., 55  
 Davis, A. E., 147, 154  
 Davis, B. B., 88  
 Davis, J. M., 367, 372,  
 375  
 Davis, J. N., 375  
 Davis, J. O., 78, 269, 270,  
 271, 272, 273  
 Davis, L. D., 51, 52  
 Davis, N. C., 11, 12  
 Davis, P. S., 146, 147,  
 154  
 Davis, R. D., 434, 439,  
 441  
 Davis, S. D., 289, 291  
 Davis, W. C., 123  
 Davis, W. W., 79  
 Dawson, A. G., 343, 344  
 Dawson, G., 324, 328  
 Dawson, R. B., Jr., 147

- Day, R. W., 339, 340  
 Deane, H. W., 78  
 De Angelis, C., 24  
 de Bono, E., 90, 91, 92, 93, 95  
 Debris, M., 101  
 De Capoa, A., 380, 386, 390  
 Decker, R. H., 68  
 De Clericq, E., 17-46; 18, 20, 21, 24, 25, 26, 28, 30, 31, 32, 35, 36, 37, 214  
 DeCoteau, E., 295  
 de Duve, C., 121, 308  
 Deetjen, P., 89  
 DeGroot, N., 434  
 De Grouchy, J., 379, 382, 384, 385, 387, 399  
 Deguchi, D., 166  
 Deinhardt, F., 19  
 De Jong, W. W. W., 163  
 de Laey, P., 349, 350  
 Delbeke, M. J., 209  
 Del Bianco, P. L., 69  
 Delea, C. S., 79, 83, 87, 89  
 De L'Hortet, G. C., 229  
 Deller, D. J., 146, 147, 154  
 Delta, B. C., 206  
 De Maeyer, E., 23, 24, 25, 28  
 De Maeyer-Guignard, J., 23, 24, 25, 28  
 De Mars, R., 348  
 De Mayo, A. P., 395  
 De Micheli, A., 55  
 de Nava, C., 382, 384, 385, 387, 399  
 Denning, C. R., 101  
 Dent, C. E., 335, 341, 342  
 Dent, P. B., 124  
 Denton, D. A., 79  
 De Pasquale, N. P., 70  
 De Roever-Bonnet, H., 207  
 Derot, M., 229, 252, 253  
 DeSanctis, R. W., 54  
 Desforages, J. F., 395  
 Designolle, M., 138  
 Desmarais, L., 387  
 Desmit, E. H., 137  
 Desmont, G., 201, 206, 209  
 Desmyter, J., 27  
 De Somer, P., 18, 20, 24, 25, 26, 28, 30, 31, 32, 35, 36  
 De-Thé, G., 31, 32  
 Deuel, H. J., Jr., 319  
 DeVassal, F., 437  
 De Verdier, C. H., 170  
 Devrin, S., 301, 311  
 de Wardener, H. E., 75, 77, 87, 88, 89, 90, 92  
 Diamond, H., 362  
 Diamond, H. D., 124  
 Diamond, L. K., 381, 394  
 Dianzani, F., 18, 20, 25, 30, 33  
 Dick, A. P., 232  
 Dicken, C. H., 68  
 Dickerson, R. E., 169  
 Diekmann, L., 390  
 Dienst, R. B., 202  
 Dietrich, L. S., 34  
 DiGeorge, A. M., 343, 346  
 Di Grado, F., 390  
 Dillaha, C. J., 59, 60, 61, 62  
 Dillard, D. H., 227  
 Dilling, L., 289  
 Dima, V. F., 30  
 Di Magno, E. P., 313  
 Dingle, J., 121  
 Dingman, J. F., 250, 266  
 Di Placido, J., 243, 244, 250, 253  
 Dirks, J. H., 77, 82, 87, 265, 270  
 di Sant'Agnese, P. A., 100, 101, 102  
 Ditman, K. S., 372  
 Dixon, F. J., 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 105, 106, 119  
 Dixon, H. G., 139, 140  
 Dixon, R. L., 435  
 Doak, P. B., 229  
 Dobbs, R. H., 338, 344  
 Dobkin, G., 385  
 Dobson, J., 339, 340, 352  
 Docter, J. M., 101  
 Dolais, J., 307  
 Doll, R., 385, 395  
 Dollinger, M. R., 438  
 Dolovitch, J., 284  
 Dolowy, W. C., 434, 435  
 Donachie, J. F., 202  
 Donald, K. W., 48  
 Donaldson, V. H., 11  
 Donnell, G., 337  
 Donnelly, W. J., 384, 385  
 Doolan, P. B., 3, 10  
 Dorfman, A., 324, 328  
 Dörmer, P., 384  
 Dossa, D., 137  
 Dossetor, J. B., 4, 9, 10  
 Dougan, L., 380, 381, 383, 384, 386, 394  
 Dougherty, J. W., 70  
 Douglas, A. S., 161, 167  
 Douglas, R. G., Jr., 34, 35, 283, 284, 293  
 Douglas, S. D., 105, 123  
 Dowling, J. T., 260  
 Dcox, A., 434  
 Doyle, A. E., 91  
 Dozy, A. M., 161  
 Dray, J., 235  
 Dreifus, L. S., 48, 49  
 Drummond, K. N., 3, 4, 10, 14, 350  
 Dry, R. M. L., 69, 70  
 Dabach, R., 151  
 Dabach, U. C., 328  
 Dabey, J. P., 202  
 Dabillier, L. D., 138  
 Dabiski, S., 11  
 Dubois, E. L., 50  
 du Buy, H., 25  
 Duc-Goiran, P., 26  
 Ducos, J., 392  
 Duesberg, P. H., 23  
 Dukes, M. N. G., 105  
 Dumas, R., 137  
 Dumont, A. E., 274, 276  
 Dumont, J., 140  
 Dunaeva, Z. U., 202  
 Duncan, D. A., 3  
 Dunningham, J. G., 89  
 Dupré, J., 299-316; 224, 225, 226, 301, 304, 307, 308, 309, 310, 311  
 Durant, J. R., 390, 399  
 Duvall, C. P., 209, 385  
 Dyce, B. J., 304  
 Dyck, W. P., 301  
 Dykes, P. W., 276

## E

- Eade, N. R., 112  
 Eanes, E. D., 358  
 Earle, D. P., 7  
 Earle, P., 211  
 Earley, L. E., 87, 80, 271, 275  
 Eaton, M. D., 179, 180  
 Ebaugh, F. G., 399  
 Ebbe, S. N., 159  
 Ebert, R. H., 109, 116, 119, 120, 122  
 Eccleston, E. G., 375  
 Eckert, J. P., 252  
 Eckstein, F., 18, 20, 21  
 Edelman, C. M., 344  
 Eder, H. A., 276, 277  
 Edery, H., 111, 112  
 Edgar, P., 224, 307  
 Edgington, T. S., 6  
 Edward, D. G., 182  
 Edwards, E. C., 138  
 Edwards, M. J., 159  
 Efremov, G. D., 173  
 Efron, M. L., 159, 160, 166, 343, 344, 351  
 Eggers, H. J., 25  
 Ehrenreich, B. A., 321  
 Ehrenreich, T., 8  
 Ehrlich, C. E., 360  
 Ehrlich, P., 113  
 Eichenwald, H. F., 206  
 Eldelman, S., 101, 289, 291  
 Eilers, E. A., 79

- Einhorn, M., 390  
 Eisen, V., 71, 363  
 Eisenberg, S., 274  
 Eisentraut, A. M., 224, 299,  
 304, 308, 309, 310, 440  
 Eitzman, D. V., 395  
 Ekert, H., 137  
 Elberg, S. S., 208  
 Eldar, S., 227  
 Elder, T. D., 348  
 Eldjarn, L., 338, 339  
 Ellis, L. F., 18, 19,  
 34  
 Elrick, H., 307  
 Elves, M. W., 381, 382,  
 399  
 Elwin, C. E., 312  
 Endahl, G. L., 313  
 Enderlin, F., 328  
 Engbring, N. H., 229  
 Engel, S., 381, 382, 383,  
 384, 385  
 Engel, R. R., 395  
 Engelbrecht, E., 204  
 Engel-de Montmolin, M.,  
 381, 382, 384, 385  
 Engle, R. L., Jr., 381  
 Enoki, Y., 159, 174  
 Ensinnck, J. W., 219, 220,  
 245  
 Entrup, R. W., 272, 273  
 Epstein, E., 61, 62  
 Epstein, S. B., 210  
 Epstein, S. W., 11  
 Epstein, W. L., 107  
 Erkmann, B., 384, 385, 392,  
 395  
 Erlandson, M. E., 155,  
 395  
 Errera, M., 434  
 Erslev, A. V., 139  
 Erspamer, V., 301  
 Eraser, R. S., 344  
 Ertel, N. H., 227  
 Essén-Möller, E., 368  
 Essner, E., 121  
 Estandia, A., 49  
 Esterhuizen, A. C., 311  
 Esterly, J. R., 100, 135  
 Estrich, D., 224  
 Evans, R., 19  
 Evans, R. G., 138  
 Evans, R. R., 11  
 Evans, R. T., 292  
 Everett, N. B., 105  
 Eymont, M. S., 232  
 Eyssen, H., 293  
 Ezdinli, E. Z., 226, 309,  
 310, 381, 385
- F
- Fabricant, J., 181  
 Fabro, S., 37, 434, 437,  
 441  
 Fadeyeva, L. L., 33  
 Fairbanks, V. F., 162  
 Faires, J. S., 70, 106, 357,  
 358, 359  
 Fairney, A., 344  
 Fajans, S. S., 223, 224, 225,  
 231, 233, 234, 250, 307  
 Fakhro, A. M., 48  
 Falchuk, K. H., 90,  
 271  
 Falcoff, E., 18, 20, 21, 23,  
 25, 26, 30, 31, 32, 35, 36,  
 37  
 Falcoff, R., 23, 31, 32, 35,  
 36, 37  
 Fales, F. W., 349  
 Falkson, G., 59  
 Falls, W. F., Jr., 8  
 Fanciullacci, M., 69  
 Fantes, K. H., 26, 27, 33,  
 34  
 Farber, E. M., 59-66  
 Farquhar, J. W., 241  
 Farquhar, M. G., 5, 291  
 Farquharson, H. A., 161  
 Farr, R. S., 191  
 Farrant, P. C., 228  
 Fasel, J., 311  
 Fauchet, M. C., 234  
 Fausci, A. S., 289  
 Fauconier, B., 27  
 Faulkner, W. R., 346  
 Fedorko, M. E., 121  
 Feinberg, L. J., 109  
 Feingold, D. S., 18, 20,  
 22  
 Feingold, J., 384, 385  
 Fejfar, Z., 274  
 Fejfarova, M. H., 274  
 Felber, J. P., 311  
 Feld, M., 320, 326  
 Feldman, D., 9  
 Feldman, H. A., 203, 206,  
 207  
 Feldman, J. D., 4, 5  
 Feldman, J. M., 235  
 Felig, P., 249, 250, 254,  
 256  
 Felix, J. S., 348  
 Fellers, F. X., 11  
 Felscher, B. F., 347  
 Felton, L. D., 440  
 Pennelly, J. J., 341,  
 342  
 Ferguson, A., 336  
 Ferguson, J., 399, 400  
 Ferluga, J., 111, 112,  
 113  
 Fern, V. H., 19  
 Fernandes, J., 345  
 Fernando, N. V., 110  
 Fernex, M., 111  
 Fernex, S., 111  
 Ferrari, I., 388, 389,  
 399  
 Fessas, P., 167  
 Festoff, B., 54  
 Firench, G., 201  
 Fichman, M. P., 259, 267  
 Fiedler, J. L., 339  
 Field, A. K., 18, 19, 20,  
 21, 22, 26  
 Field, J. B., 344  
 Figallo, M. A., 151  
 Fillmore, S. H., 48  
 Finberg, L., 344  
 Finch, C. A., 146, 147, 148,  
 149, 151, 152, 153, 154,  
 155, 163  
 Finch, S. C., 106, 107,  
 123  
 Finckh, E. S., 209  
 Findlay, G. M., 17  
 Fine, A., 336  
 Fine, R. N., 137  
 Finkelstein, M. S., 17, 18,  
 20, 21, 22, 25, 28, 30, 36  
 Finland, M., 185  
 Finstad, J., 11  
 Finter, N. B., 17, 18, 30,  
 31, 32, 36  
 Fireman, P., 187, 191  
 Firshein, W., 28  
 Fischel, E. E., 10  
 Fischer, G. A., 434, 438  
 Fischer, P., 396  
 Fischer, R., 385  
 Fish, A. J., 5, 10  
 Fishbein, W. N., 384, 386  
 Fishleder, B. L., 55  
 Fishler, K., 337  
 Fishman, A. P., 102  
 Fishman, M., 117  
 Fitch, F. W., 281  
 Fitzgerald, G. R., 31,  
 32  
 Fitzgerald, J. D. L., 11  
 Fitzgerald, O., 341, 342  
 Fitzgerald, P. H., 380, 383,  
 384, 385, 388, 389, 390,  
 391, 392, 399  
 Fitzgerald, W. A., 182  
 Fjellanger, I., 284, 287, 289,  
 293  
 Flament-Durant, J., 209  
 Flanagan, N. B., 367,  
 369  
 Flanigan, S., 397  
 Fleischmann, L. E., 270  
 Fleisher, G. A., 363  
 Flemans, R. J., 381  
 Flenley, D. C., 49  
 Fletcher, G. F., 55  
 Fletcher, J., 151  
 Fletcher, S., 204  
 Flexner, J. M., 385  
 Flood, C., 274  
 Florey, H. W., 106, 120  
 Floyd, J. C., Jr., 223, 224,  
 225, 233, 234, 250, 307  
 Floyd, W. L., 54  
 Fluck, D. C., 48  
 Flute, P. T., 141  
 Flygenring, J., 368  
 Foa, P. P., 228, 311  
 Foft, J. W., 205, 206

Fogh, H., 184  
 Fogh, J., 184  
 Foley, V., 213  
 Folkow, B., 271  
 Fontaine, D., 31, 32, 35  
 Fontaine-Brouty-Boye, D., 31, 32, 36  
 Forbes, M., 37  
 Ford, D. K., 184  
 Ford, K. L., 8  
 Ford, R., 339, 340  
 Fordtran, J. S., 349  
 Forrester, R. H., 380, 386, 394  
 Forristal, J., 11, 12  
 Forscher, B. K., 105  
 Forsham, P. H., 219, 223, 224, 225, 228, 233, 243, 251, 252, 253  
 Forssman, W. G., 312  
 Fortune, D. W., 381  
 Fosbrooke, A. S., 225  
 Fournier, F., 23, 37  
 Fraimow, W., 171  
 Franchi, G., 69  
 Francis, D., 344  
 Francis, D. E. M., 336  
 Frank, B. H., 434, 435  
 Frank, C. W., 273  
 Frank, H., 150  
 Frank, H. E., 385  
 Frankenburg, W., 340  
 Franklin, E. C., 187  
 Franklin, M., 7  
 Fraser, I. L., 399  
 Fraser, R., 81, 219, 245  
 Fratantoni, J. C., 322  
 Frawley, T. F., 233, 234  
 Fray, A., 14  
 Fredholm, B., 114  
 Fredrickson, D. S., 324, 325, 326, 335, 344  
 Freed, B. A., 123  
 Freedman, H. L., 122  
 Freedman, P., 4  
 Freeman, A., 434, 436, 440  
 Freeman, M., 102  
 Frei, E., III, 380, 381, 383, 384, 385, 388, 390, 391, 392, 399, 436  
 Freinkel, N., 219, 220, 253  
 Freireich, E. J., 123, 388, 390, 391, 437, 438, 439, 440, 441  
 Freminand, L., 140  
 Frenkel, J. K., 201, 202, 203, 207, 208, 209, 210  
 Freshman, M. M., 18, 212  
 Freudweiler, M., 358  
 Frey, I., 380, 386, 394  
 Frey, W., 49  
 Freychet, P., 252, 253

Frezzotti, R., 30  
 Frick, P. G., 138, 162  
 Friden-Kill, L., 394  
 Frieden, J., 50  
 Friedland, C., 55  
 Friedler, R. M., 87, 90, 271  
 Friedman, A., 28, 120, 214  
 Friedman, E., 115, 118  
 Friedman, R. M., 18, 22, 30, 33  
 Friedman, S. B., 34  
 Friedman-Kien, A. E., 18, 19, 20, 21, 25  
 Friend, J. A. R., 252  
 Frimpter, G. W., 335, 347  
 Frist, J., 276  
 Frizel, D., 374  
 Frohman, L. A., 219, 226, 231, 310  
 Fröhling, J., 380, 386, 392, 393, 394  
 Fruhman, G. J., 107  
 Fruitstone, M. J., 24  
 Fry, B. A., 203  
 Fry, L., 65  
 Fudenberg, H. H., 13, 105, 123, 187, 197, 350  
 Fuizaz, R., 260  
 Fujimoto, S., 77  
 Fujimoto, W. Y., 348  
 Fujimura, T., 161  
 Fukayama, A. B., 224  
 Fukazawa, T., 201  
 Fullmer, H. M., 122  
 Fulton, J. D., 204  
 Furlminger, I. G. S., 26  
 Fyfe, W. M., 138

## G

Gable, A., 48, 56  
 Gabrylewicz, A., 139  
 Gaddis, E. M., 347  
 Gaffney, P. J., 161, 162  
 Gaffney, T. E., 274  
 Gagnoni, S., 18, 20, 25  
 Gaines, S., 28  
 Gajdusek, D. C., 10  
 Gal, A. E., 319, 320, 327, 328  
 Galan, H. M., 399  
 Galbraith, P. R., 395  
 Gallagher, J. G., 29, 30  
 Gallian, E., 229  
 Gallo, E., 159, 161  
 Gallo, G., 4, 10  
 Galton, D. A. G., 363, 382  
 Galton, M., 396  
 Gann, D. S., 85, 274, 276  
 Ganner, E., 399  
 Ganong, W. F., 85, 86

Garapin, A., 28  
 Garattini, S., 105  
 Garayzin, S., 214  
 Garby, L., 170  
 Garin, J. P., 204  
 Garside, R. F., 369, 370  
 Garvey, M. B., 399  
 Gatenby, P. B. B., 336  
 Gates, L., 339, 340  
 Gatter, R. A., 364  
 Gattuta, M. L., 110  
 Gauer, O. H., 85, 262  
 Gaull, G. E., 342  
 Gauntt, C. J., 33  
 Gayle, E. E., 161  
 Gaynor, E., 319  
 Gavosto, F., 385  
 Gavras, H., 139  
 Gee, T., 437, 438  
 Geiser, G., 209  
 Gelderman, A. H., 209, 210, 212  
 Geller, W., 399  
 Gellerman, G. L., 52  
 Genco, R. J., 292, 294  
 Genest, J., 78, 79  
 Genova, R., 441  
 Genton, E., 56  
 George, B. C., 259, 266  
 George, W. F., 335, 347  
 Gerald, P. S., 159, 160, 166, 381, 394  
 Gerbeaux, J., 201  
 Gergely, L., 23  
 German, J., 394, 395, 399  
 Gernuth, F. G., Jr., 5, 138  
 Gersberg, H., 235  
 Geschikter, E. H., 116, 119, 122  
 Gesner, B., 182, 183  
 Gessner, U., 161  
 Gewurz, H., 11, 12, 115, 119  
 Ghal, O. P., 336  
 Gianantonio, C., 137, 138  
 Gianelly, R., 51, 52, 53  
 Gianetto, R., 121  
 Giblett, E. R., 157  
 Gibson, Q. H., 159  
 Giebisch, G., 76, 77, 80  
 Gilchrist, G. S., 137  
 Gilgenkrantz, S., 384  
 Gill, E. J., 30  
 Gill, J. R., Jr., 269-80; 93, 270  
 Gill, T. J., III, 12  
 Gillian, E., 241  
 Gillies, R. R., 252  
 Gillis, E. M., 385  
 Gilmore, J. P., 93  
 Gilmore, V., 110  
 Ginsberg-Fellner, F., 243  
 Gisin, S., 31

- Gitlin, D., 191  
 Gitzelman, R., 337  
 Gjeruldsen, S. T., 284, 287,  
 289, 293  
 Glade, P. R., 19  
 Glasgow, L. A., 19, 23, 24,  
 27, 28, 29, 30, 34, 138,  
 212  
 Glasser, L., 206  
 Glassner, S., 367  
 Glasscock, R. J., 3, 6,  
 9  
 Gleadie, R. I., 139  
 Gleason, R. E., 222, 233  
 Glenn, E. M., 106  
 Glezayd, E. A., 281, 291  
 Glick, S. M., 243, 251  
 Glovsky, M. M., 13  
 Gluck, C. M., 229, 242  
 Glynn, A. A., 293  
 Glynn, K. P., 159  
 Gmyrek, D., 394, 395  
 Go, V. L. W., 313  
 Goaman, L. C. G., 168,  
 169  
 Goddard, M., 48  
 Goding, J. R., 79  
 Godlowski, F., 245  
 Godman, M. J., 48  
 Goetz, F. C., 230  
 Goh, K. O., 380, 381, 385,  
 392, 399  
 Goldberg, E. M., 234  
 Goldberg, L. I., 93,  
 274  
 Goldberg, L. S., 350  
 Goldfien, A., 86  
 Goldfinger, S. E., 71, 361,  
 362  
 Goldman, M., 203  
 Goldman, R. F., 229, 242  
 Goldsmith, H. J., 138  
 Goldsmith, H. S., 124  
 Goldstein, J., 173  
 Golob, E., 396  
 Golub, E. S., 122  
 Golub, J. R., 273  
 Gonatas, J., 329  
 Gonatas, N. K., 329  
 Gonzalez-Auvert, C., 259,  
 266  
 Good, R. A., 4, 5, 10, 11,  
 12, 14, 115, 116, 119, 123,  
 124, 138, 287, 288, 289,  
 350  
 Goodburn, G. M., 180,  
 183  
 Goodfriend, B., 195  
 Goodkind, M. J., 270  
 Goodlin, R. C., 397  
 Goodman, A. D., 233, 260,  
 283  
 Goodman, H. C., 187  
 Goodman, J. W., 120  
 Goodman, M. L., 209  
 Goodman, S. I., 344  
 Goodner, C. J., 235  
 Goonan, S. R., 262  
 Gorden, P., 219, 245  
 Gordon, B. M., 434, 439,  
 441  
 Gordon, E. S., 253  
 Gordon, F. B., 18, 29,  
 30  
 Gordon, P. H., 342  
 Gordon, R. D., 83, 86, 93  
 Gordon, S., 159  
 Gorhe, D. S., 28, 29  
 Gorrr, G., 434  
 Goth, A., 105, 113  
 Gotoff, S. P., 11  
 Gottschalk, A., 435  
 Goulain, M., 390  
 Govaerts, J. P., 305  
 Gowans, J. L., 105, 107,  
 120  
 Gozsy, B., 105, 108,  
 113  
 Grabar, P., 105  
 Graber, A. L., 226, 233,  
 234, 310  
 Grace, W. J., 55  
 Graham, F. K., 340  
 Graham, H. T., 114  
 Graham, R. C., Jr., 109,  
 116, 119  
 Graham, S., 61  
 Graliker, B. V., 337  
 Gralla, E. J., 71, 361  
 Gralnick, H. R., 439  
 Granger, G. A., 28  
 Grant, A. M., 234  
 Grant, D. B., 225, 228,  
 233  
 Grant, D. J., 63  
 Grant, L., 105, 109  
 Grasso, S. G., 223, 224,  
 225, 251  
 Gravelle, C. R., 34  
 Gray, C. H., 252  
 Gray, J. A., 394  
 Gray, J. S., 299  
 Greaves, M., 112  
 Green, G. E., 292  
 Green, H., 32, 322  
 Green, H. H., 259, 266  
 Green, J., 159  
 Green, J. A., 18, 27,  
 28  
 Green, O. C., 252  
 Green, R., 147, 151  
 Greenberger, N. J., 225  
 Greenblatt, M., 373  
 Greene, H. L., 324  
 Greengard, H., 304  
 Greenstein, J., 434  
 Greenwalt, C., 31, 32  
 Greenwood, F. C., 253  
 Greenwood, T. W., 48  
 Greer, J., 170  
 Gregerman, R. I., 252  
 Gregory, D. F., 37  
 Gregory, R. A., 300,  
 313  
 Greif, R. L., 276, 277  
 Gresser, I., 29, 31, 32, 35,  
 36, 37  
 Grey, H. M., 285, 287  
 Griffin, J. R., 52, 53  
 Griffin, W., 31, 32  
 Grimes, A. J., 162, 164,  
 166  
 Grimley, P. M., 209, 210  
 Grippenberg, U., 399  
 Grodsky, G. M., 219, 221,  
 223, 224, 225, 228, 233,  
 243, 251, 253  
 Groen, J. J., 227  
 Grönroos, P., 207  
 Gropp, A., 385, 399  
 Grosowicz, N., 434, 438  
 Gross, F., 78, 82  
 Gross, M. A., 439  
 Grossbard, L., 380, 386,  
 390  
 Grosser, G. H., 373  
 Grossman, M. I., 299, 301,  
 302, 304, 309, 313  
 Groves, M. L., 292  
 Gruenwald, H., 381  
 Grupe, W. E., 8  
 Grushkin, C., 137  
 Gruskay, F. L., 123,  
 124  
 Guerra, R., 30  
 Guggenheim, M. A., 22  
 Guillemain, B., 31, 32  
 Gullen, H., 211  
 Guntz, E. M., 224  
 Gunz, F. W., 379, 380, 383,  
 386, 389, 390, 391  
 Gupta, P. D., 86, 261,  
 262  
 Gurri, J., 202  
 Gusberg, S. B., 396  
 Guttman, R. D., 9  
 Guzman, F., 70  
 Gwinup, G., 223, 232

H

- Haab, O. P., 106, 107  
 Haahr, S., 24, 28, 34  
 Haase, A. T., 19  
 Habbib, R., 137, 138  
 Haber, E., 48  
 Haberkern, R., 5, 138  
 Habermann, E., 71, 72  
 Hackel, D. B., 6  
 Hackney, I. M., 340,  
 341  
 Haddock, J. N., 371  
 Hadházy, Gy., 23  
 Hadjikhani, H., 311  
 Haegermark, O., 114  
 Hagen, P., 114  
 Haggard, N. E., 345  
 Hagge, W. W., 138  
 Hagirtay, B., 77  
 Hagitara, T., 201  
 Hagnell, O., 368

# AUTHOR INDEX

455

- Hahon, N., 18, 29, 30  
Haines, M., 395  
Hainsworth, R., 85  
Haist, R. E., 231  
Halbrecht, I., 161  
Halbrook, N. J., 13  
Hales, C. N., 232  
Haley, E. E., 434  
Hall, B., 392  
Hall, C. W., 322  
Hall, E. C., 204, 205  
Hall, J. G., 117, 120  
Hall, P. W., 75  
Hallberg, L., 152  
Halliday, N., 319  
Hallum, J. V., 18, 20, 22, 26, 33  
Hallund, O., 245  
Halpern, B., 10, 14  
Halpern, Y., 434  
Ham, T. H., 185  
Hamberger, C. A., 231  
Hambræus, L., 341, 342  
Hamilton, H. B., 159  
Hamilton, R. D., 33  
Hammack, W. J., 399  
Hammerstrom, R. A., 117  
Hammond, D., 395  
Hammouda, F., 379, 381, 384, 385, 386, 390, 392  
Hampel, K. E., 380, 383  
Hampers, C. L., 229, 230  
Hampson, R., 159  
Hamwi, G. J., 232  
Han, P. W., 242  
Hanada, M., 161  
Handschumacher, R. E., 433-44; 434, 436, 437, 438, 439, 440, 441  
Hane, S., 252  
Hanley, T., 229, 245, 246  
Hanley, W. B., 340, 341  
Hanna, L., 18, 29, 30  
Hansemann, D. V., 379  
Hansen, J. M., 32  
Hansen, S., 341, 342  
Hanshaw, J. B., 19, 29, 30  
Hanson, L. A., 288  
Hansson, H. A., 211  
Hansteen, T. L., 396  
Hardisty, R. M., 381  
Hardy, P. M., 300  
Hardy, W. R., 105  
Harkins, H. N., 153  
Harnden, D. G., 380, 381, 384  
Harper, A. A., 299, 306  
Harrington, A. R., 259, 266  
Harrington, J. T., 14  
Harris, A. S., 49  
Harris, H., 115, 116  
Harris, J. E., 437, 438, 439, 440, 441  
Harris, T. N., 117  
Harrison, D. C., 50, 51, 52, 53, 270, 274  
Hart, H. C. L., 137  
Hart, R. G., 169  
Harthorne, J. W., 54  
Hartley, T. F., 282  
Hartman, J., 163  
Hartman, R. E., 154  
Hartman, R. S., 154  
Hartmann, L., 399  
Hartmann, R. C., 381, 384  
Hartroft, P. M., 78, 273  
Hartroft, W. S., 78  
Harvey, A. C., 48  
Haserick, J. R., 63  
Hashim, S. A., 225  
Haskell, C. M., 436, 437, 438, 439, 440, 441  
Hauschka, T. S., 379, 380, 381, 383, 388, 392, 394  
Hausmann, K., 149  
Haverback, B. J., 304  
Havez, R., 284  
Havivi, E., 227  
Hawkins, D., 11  
Haworth, J. C., 289  
Hawryluk, A. P., 397, 398  
Hayaashi, A., 159  
Hayaashi, N., 159  
Hayat, M., 437  
Haylick, L., 180, 184, 379  
Hayhoe, F. G. J., 379, 381, 384, 385, 389, 390, 392  
Hays, D. R., 273  
Hayalett, J. P., 8  
Hayter, C. J., 75, 87, 88, 89, 92  
Hayward, S. K., 441  
Hazlett, B., 392  
Hazzard, W. R., 230, 233, 243  
Heath, C. W., 380, 383, 386, 390, 394  
Heath, R. B., 25, 28  
Hecht, A., 235  
Hecht, F., 163  
Hedgcock, C., 435  
Heding, L. G., 304  
Heeley, A. F., 340  
Heesom, N., 105, 121  
Hegstrom, R. M., 230  
Heick, H. M. C., 103, 104, 345  
Heilman, D. H., 117  
Heiman, D. F., 54  
Heimer, R., 292  
Heinemann, H. O., 266  
Heinenberg, S., 159, 173  
Heinisch, B., 149  
Heinle, E. W., 147  
Heinrich, H. C., 149  
Helfant, R. H., 49, 52  
Helgason, T., 368  
Helge, H., 252  
Hellegers, A. F., 162  
Helleman, P. W., 137  
Heller, B. I., 274  
Heller, P., 157, 159, 160, 285, 286, 290  
Hellman, E., 201  
Hellman, E. S., 347  
Heim, F., 59, 61, 62, 63  
Helson, L., 437, 438, 439, 440  
Heinig, J., Jr., 54  
Hemsath, F. A., 209  
Hemsted, E. H., 166  
Henderson, J. F., 348  
Hendrickse, R. G., 13  
Henl, F., 399  
Henle, G., 19, 399  
Henle, W., 19  
Henley, E. D., 245  
Henne, G., 77  
Henneman, P. H., 252  
Hennen, B. K., 348, 349  
Henney, C. S., 284  
Henriksen, F. W., 304, 305, 306  
Henry, J., 380, 386, 392, 393, 394  
Henry, J. P., 85, 86, 261, 262  
Henry, P. H., 439  
Hensen, S., 385  
Henson, D., 434  
Henson, P. M., 5  
Herber, R., 336, 337  
Herbert, V., 147, 347  
Herdman, R. C., 10  
Heremans, J. F., 187, 282, 284, 289, 290, 291, 292, 293  
Herion, J. C., 122  
Herjanic, M., 369  
Herman, E. C., 381  
Hermann, R. E., 345, 346  
Herndon, J. H., Jr., 338, 339  
Herrera, M. G., 220  
Hers, H. G., 317, 329  
Hersh, E. M., 105-32; 123, 124  
Hertelendy, F., 226  
Herziz, M. M., 293  
Heymann, W., 6  
Hickie, J. B., 274  
Hicklin, M. D., 8  
Hierholzer, K., 76, 77, 80  
Higgins, J. T., Jr., 269, 270, 273  
Higgins, L. C., Jr., 394  
Higgins, M. R., 48  
High, G. J., 6



- Hilgartner, M. W., 155  
 Hill, I. D., 439  
 Hill, J. M., 434, 437, 439, 440, 441  
 Hill, N. O., 437  
 Hill, R. J., 172  
 Hill, R. L., 173  
 Hill, R. W., 434, 437, 439, 440, 441  
 Hilleman, M. R., 17, 18, 19, 20, 21, 22, 23, 26, 28, 31, 36, 214  
 Hilmi, K. I., 52  
 Hilton, J. G., 273  
 Himmelweit, F., 18, 19  
 Hinman, J. W., 77, 88  
 Hinohara, M., 19  
 Hinton, P., 227  
 Hinz, J. E., 159  
 Hird, F. J. R., 343, 344  
 Hirsch, J., 229, 241, 242, 246  
 Hirsch, J. G., 121  
 Hirsch, M. S., 8  
 Hirschhorn, K., 379, 394  
 Hirson, C., 141  
 His, W., Jr., 358  
 Hitzig, W. H., 137, 138, 162  
 Hlad, C. J., 307  
 Ho, D. H., 436  
 Ho, M., 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 34, 35  
 Ho, P. P. K., 434, 435  
 Hobbiger, F., 70  
 Hobik, H. P., 441  
 Hochwald, G. M., 289  
 Hodes, H. L., 293  
 Hodge, R. L., 85  
 Hodgsworth, C. D., 307, 308, 309  
 Hoefnagel, D., 394  
 Hoehn, M. M., 19  
 Hoexter, B., 301  
 Hoffbauer, H., 203  
 Hoffman, B. F., 48, 49, 51, 52  
 Hoffman, W. K., Jr., 270  
 Hogan, J. M., 357  
 Hoghadi, A., 152  
 Holden, R. A., 229  
 Holdstock, D. J., 71  
 Holkova, R., 201  
 Holland, J. F., 434, 436, 440  
 Holland, N. H., 11  
 Holland, S. N., 395  
 Hollander, J. L., 357  
 Hollenberg, M. D., 261  
 Hollender, A., 161, 166  
 Holley, K. E., 8, 138  
 Hollings, M., 18, 19  
 Hollingsworth, J. H., 141  
 Hollister, L. E., 371, 372, 373  
 Holman, H. R., 4  
 Holman, J. E., 270  
 Holmes, B. H., 123, 124  
 Holmes, J. H., 229  
 Holmes, L. B., 344  
 Holsclaw, D., 101  
 Holt, G. A., 60, 62  
 Holt, N. F., 371  
 Holton, C. P., 381  
 Holtz, A. I., 324, 325  
 Holtzman, N. A., 335-56; 162, 339  
 Holzgreve, H., 76, 77, 80  
 Honeycutt, W. M., 59, 60, 61, 62  
 Hong, R., 287, 289, 293  
 Hood, T. E., 222  
 Hood, W. B., 48  
 Hoedt, C., 209, 348, 349, 350  
 Hope, D. R., 261  
 Hopkins, I. J., 343, 344  
 Hopps, H. E., 18  
 Hordern, A., 371  
 Horlein, H., 160  
 Hornbrook, M. M., 187, 188, 189, 190, 194  
 Horowitz, A., 140  
 Horowitz, B., 435, 436, 440  
 Horsfall, F. L., 185  
 Horsfield, G. I., 114  
 Horster, M., 77, 84, 91, 271  
 Horton, E. S., 229, 230, 242  
 Hosain, F., 151  
 Hosfield, W. B., 339  
 Hoshino, M., 19  
 Hoskins, M., 17  
 Hosfeld, D. K., 379-408  
 Houck, J. C., 105, 106  
 Hourihane, D. O'B., 133, 134, 137, 139, 140  
 Housewright, R., 434  
 Houston, E. W., 383, 392, 399, 400  
 Howards, S. S., 88, 270  
 Howe, J. H., 6  
 Howell, D. S., 269, 270, 271  
 Howell, R. R., 70, 106, 323, 345, 358, 359, 361, 362  
 Hoyer, L. W., 141  
 Hrušková, J., 18  
 Hsia, D. Y. Y., 335, 337, 339, 340, 344  
 Hsia, Y. E., 346  
 Hsu, K. C., 4, 7, 9, 10, 289, 290  
 Huang, A. S., 22  
 Huang, C. Y., 7  
 Huang, K.-Y., 18, 29, 30  
 Huang, N., 103  
 Huang, S. S., 336  
 Huang, T., 341  
 Hubbard, L., 102  
 Huber, H., 123  
 Hubner, J., 204  
 Hudson, F. P., 340  
 Huebner, D., 102  
 Huebner, R. J., 7, 25, 31, 32, 36  
 Huehns, E. R., 157-78; 151, 157, 158, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 171, 172, 173  
 Hug, G., 324  
 Hughes, D. T., 379, 396, 398  
 Hughes, M., 272, 273  
 Hughes-Jones, N. C., 91, 95  
 Huguley, C. M., Jr., 345  
 Huismann, T. H. J., 161, 163, 172, 173  
 Huke, M., 235  
 Hult, G., 207, 210  
 Hulka, J. F., 293  
 Humair, L. M., 11, 14  
 Humbel, R., 343, 344  
 Humble, J. G., 117  
 Humke, W., 149  
 Humphrey, J. H., 198  
 Hungerford, D. A., 379, 380, 381, 392, 394  
 Hunt, J. A., 172, 173  
 Hunt, J. C., 275  
 Hunter, E., 162  
 Hunter, G. W., Jr., 347  
 Hunter, J. L. P., 6  
 Hunter, W. M., 226, 252  
 Huntsman, R. G., 141  
 Hurez, D., 287  
 Hurley, J. V., 108, 111, 115, 118, 119, 120, 122  
 Hurlimann, J., 284, 286, 287, 289  
 Hurst, J. W., 55  
 Huser, H.-J., 147  
 Hussain, R., 147, 152  
 Hutchings, R. H., 230  
 Hutchison, H. E., 139, 161, 164, 167, 383  
 Hutchison, W. M., 202  
 Hutzler, J., 344  
 Hvidberg, E., 110  
 Hwang, W., 272  
 Hyatt, R. E., 270  
 Hylton, M. B., 292  
  
 I  
 Ide, T., 219  
 Ikeda, H., 204, 205  
 Inai, K., 159  
 Imaizumi, K., 201  
 Imamura, T., 161  
 Inceman, S., 141

- Ingram, V. M., 171, 172, 173  
 Inui, N., 397  
 Irby, R., 361  
 Iritani, C., 437  
 Irvine, D., 172, 173  
 Isaacs, A., 17, 29, 34  
 Issacs, W. A., 159, 161  
 Isaacson, C., 153  
 Isaksson, A., 371  
 Ishihara, T., 380, 381, 383, 385, 388, 389, 391, 392, 394, 396, 397, 398, 399  
 Ishii, T., 201  
 Ishizaka, K., 187-200; 187, 188, 189, 190, 191, 193, 194, 195, 196, 197, 198, 199, 284  
 Ishizaka, T., 187, 188, 189, 190, 191, 194, 195, 196, 197, 198, 199  
 Island, D. P., 83, 86, 93, 276  
 Israel, L., 101  
 Israels, M. C. G., 381, 382, 399  
 Issekutz, B., Jr., 256  
 Isseibacher, K. J., 337, 338, 344  
 Ito, H., 349  
 Ito, S., 203  
 Ito, T., 380, 383, 384, 385, 389, 391  
 Itokawa, Y., 346  
 Iuchi, I., 159, 172  
 Ivy, A. C., 299, 304  
 Iwata, K., 210
- J
- Jabrov, A. A., 30  
 Jackson, J. F., 394, 397  
 Jackson, R. C., 434  
 Jackson, W. P., 232  
 Jacob, F., 22  
 Jacob, H. S., 166  
 Jacob, R. A., 106  
 Jacobasch, G., 394, 395  
 Jacobs, A. S., 161, 172, 173  
 Jacobs, E. M., 381  
 Jacobs, L., 201, 202, 203, 204, 207  
 Jacobs, P., 146, 147, 148, 149, 150, 153  
 Jacobs, P. A., 380, 381, 382, 383, 384, 389, 390, 391, 394, 399  
 Jacobs, S. P., 438  
 Jacobsen, E. B., 289  
 Jacobson, C. B., 321, 331, 348, 384  
 Jacobson, K., 109  
 Jacobson, L. O., 390  
 Jacobson, M., 230  
 Jacobson, W. E., 274  
 Jaffe, E. R., 160  
 Jaffe, I. A., 8  
 Jahiel, R. L., 29, 30, 213  
 James, I. M., 83  
 James, V. H. T., 81  
 James, W. D., 184  
 Jamieson, J. D., 310  
 Janeway, C. A., 11  
 Janisch, W., 211  
 Janoff, A., 71, 172, 439  
 Janowitz, H. D., 301  
 Jansen, G. T., 59, 60, 61, 62  
 Jaques, S., 71  
 Jaraskova, L., 28  
 Jarlot, B., 138  
 Jarrett, R. J., 225  
 Jarvik, M. E., 70  
 Jasan, M. K., 231  
 Jasmín, C., 437  
 Jatzkewitz, H., 323, 330, 331  
 Javid, R., 226, 310  
 Jawetz, E., 18, 29, 80  
 Jayaram, H. N., 434  
 Jayne, W. H. W., 117  
 Jean, R., 137  
 Jeffries, G. H., 289  
 Jenkin, H. M., 18  
 Jenkins, D. E., Jr., 382  
 Jenkins, T., 159  
 Jenner, F. A., 435  
 Jennings, R. B., 7  
 Jensen, M. K., 381, 388, 389, 390, 391, 392  
 Jensen, M. M., 24  
 Jentsch, J., 72  
 Jepson, J. B., 69, 349, 350  
 Jettmar, H. M., 207  
 Jewitt, D. E., 55  
 Jim, R. T. S., 173  
 Jimenez, L., 28  
 Job, J. C., 138  
 Joffe, B. I., 232  
 Johansson, B. G., 284, 285, 288  
 Johansson, M. B., 111  
 Johansson, S. G. O., 191, 192, 195, 197, 198, 199, 284  
 Johns, E. J., 79  
 Johnson, A. G., 28  
 Johnson, A. R., 114  
 Johnson, C., 229, 230  
 Johnson, J. C., 7  
 Johnson, J. S., 292  
 Johnson, L. R., 301  
 Johnson, M., 373  
 Johnson, M. L., 25  
 Johnson, W. G., 321  
 Johnson, W. W., 381  
 Johnston, C. I., 273  
 Johnston, J., 106  
 Johnston, R. B., Jr., 123  
 Joklik, W. K., 33  
 Jones, C. H., 138  
 Jones, C. T., 336  
 Jones, D. B., 138, 137, 139  
 Jones, H. W., 396, 398  
 Jones, L. G., 148  
 Jones, N. F., 77, 91  
 Jones, P. M., 350  
 Jones, R. T., 157, 158, 159, 161, 162, 163, 168, 173  
 Jones, R. V. H., 77  
 Jones, T. C., 18, 212  
 Joplin, G. F., 245  
 Jorgensen, K. R., 253  
 Jorpes, J. E., 300, 301  
 Joseph, R., 138  
 Joseph, R. R., 140  
 Joy, R. J. T., 154  
 Jue, J., 272, 273  
 Juel-Jensen, B. E., 64  
 Juel-Nielsen, N., 368  
 Juhlin, L., 65, 111  
 Julian, D. G., 48, 56  
 Jullien, P., 23, 24, 28  
 Justus, B. W., 146
- K
- Kabach, M. M., 323  
 Kagan, A., 270  
 Kahle, L. L., 123  
 Kahn, A., 434, 437, 439, 440, 441  
 Kaiser, E., 71  
 Kaiser, G. A., 49  
 Kajinuma, H., 219, 227  
 Kakkamanis, E., 181  
 Kalkhoff, R. K., 230  
 Kaloustian, V. M. D., 335  
 Kaloyanides, G. J., 271  
 Kamada, N., 380, 383, 384, 385, 389, 391  
 Kamoshita, S., 346  
 Kampine, J. P., 319, 320, 326  
 Kanazawa, Y., 219, 223  
 Kaneko, Y., 83  
 Kaneto, A., 226, 227  
 Kanfer, J. N., 319, 320, 324, 325, 326, 330  
 Kanter, A., 9  
 Kanter, D. M., 273  
 Kantor, T. G., 70  
 Kancow, U., 399  
 Kaplan, E., 101  
 Kaplan, E. L., 123, 124  
 Kaplan, H., 382  
 Kaplan, I. W., 64  
 Karady, S., 114  
 Karam, J. H., 223, 224, 225, 228, 233, 243, 251, 253  
 Kariya, T., 375  
 Karl, H. J., 252  
 Karnovsky, M. L., 361  
 Karush, F., 292  
 Karwiciw, T., 18, 20, 21, 25

- Karzon, D. T., 288, 293, 294  
 Kasel, J. A., 19  
 Kash, S. L., 272  
 Kashgarian, M., 8  
 Kassoff, A., 233  
 Kastor, J. A., 54  
 Kasukawa, R., 6  
 Katayama, K. P., 396, 397, 398  
 Kato, L., 105, 108, 113  
 Kato, N., 25, 34  
 Katsube, Y., 201  
 Kattlove, H. E., 319  
 Katz, G., 372, 373  
 Katz, L. N., 48, 272  
 Katz, M., 19  
 Katz, S. L., 64  
 Katz, W. A., 360  
 Katzen, H., 327  
 Kauder, E., 123  
 Kauer, G. L., Jr., 381  
 Kaufman, B., 330  
 Kaufman, H. E., 36  
 Kaufman, M. A., 209  
 Kaufman, R. M., 146  
 Kauzmann, W., 165  
 Kayin, H., 147  
 Kawade, Y., 25  
 Kay, D. W. K., 367, 369, 370  
 Kay, H. E. M., 383, 392, 393, 394  
 Kaye, R., 227  
 Kayes, J., 367  
 Kazár, J., 18  
 Ke, Y. H., 21, 23, 26, 27, 28, 35  
 Kean, B. H., 201, 202  
 Keating, J. H., 273  
 Keel, H. J., 209  
 Keele, C. A., 67-74; 67, 68, 69, 70, 71, 72  
 Keen, H., 225  
 Keimowitz, R. I., 90, 271  
 Keisser, H., 121  
 Kekwick, A., 232  
 Kelen, A. E., 204  
 Kelleher, P., 229, 242  
 Keller, H. U., 115, 116, 117, 118  
 Keller, M. K., 395  
 Keller, P., 232  
 Keller, R., 114  
 Kellermeyer, R. W., 71, 360  
 Kelley, V. C., 232  
 Kelley, W. N., 348  
 Kellner, A., 202  
 Kelly, W. D., 124  
 Kelly, W. G., 78, 79, 80  
 Kelsall, M. A., 114  
 Kelsch, R. C., 276, 344  
 Kemomaki, M., 343  
 Kemp, N. H., 380, 381, 384, 392, 393  
 Kendall, R. E., 369, 370  
 Kendrew, J. C., 165, 168, 169  
 Kenis, Y., 380, 383, 384, 385  
 Kennedy, B. J., 201, 209  
 Kennedy, J. L., 339, 340  
 Kennedy, J. W., 52  
 Kenner, G. W., 300  
 Kenny, J. F., 285  
 Kensler, C. J., 438  
 Keonil, P., 283, 284  
 Kerkhofs, H., 394  
 Kerr, I. H., 33  
 Kessel, R. W. I., 28  
 Ketterer, H., 225, 304, 308, 309  
 Khan, M. H., 380, 384, 386, 390, 394  
 Khaw, K., 99, 100, 101  
 Khooyarian, N., 29, 30  
 Khuri, P. D., 172  
 Kibel, M., 137, 138  
 Kibrick, S., 18, 27, 28  
 Kibukamusoke, J. W., 8  
 Kidd, J. G., 433, 434, 435  
 Klekens, R., 305  
 Kiesel, J. L., 343, 344  
 Kieser, G., 209  
 Kill, F., 87  
 Kikuchi, G., 159  
 Kikuchi, Y., 388, 389, 391, 396, 397, 398, 399  
 Kilbourne, E. D., 18, 19, 24, 28  
 Kilham, L., 19  
 Killip, T., 54, 56  
 Kilmartin, J. V., 170  
 Kilo, C., 313  
 Kim, E. S., 301  
 Kim, J., 380, 386, 390  
 Kim, J. H., 434, 435, 437, 439, 441  
 Kimball, A. C., 201, 202  
 Kimball, J. T., 54, 56  
 Kimbell, I., Jr., 373  
 Kimura, H., 342  
 Kincaid-Smith, P., 14, 139  
 King, L. J., 367-78; 367  
 King, L. S., 62  
 King, M. J., 380, 381, 384, 385  
 Kingma, S., 162  
 Kinlough, M. A., 380, 389, 392  
 Kinsell, L., 224  
 Kinson, G. A., 79  
 Kint, J. A., 329  
 Kinter, W. B., 349  
 Kiosoglou, K. A., 380, 381, 385, 386, 388, 389, 390, 391, 392, 394, 395  
 Kipnis, D. M., 221, 224, 226, 228, 231, 233, 243, 244, 249, 251, 309  
 Kira, J., 204  
 Kirchstein, R. L., 34, 35  
 Kirkland, J. A., 398  
 Kirkman, H. N., 343, 344  
 Kirn, A., 35  
 Kirschbaum, J., 434  
 Kirsner, J. B., 281, 291  
 Kistenmacher, M., 103  
 Kistin, A. D., 54  
 Kissel, J. W., 105  
 Kitabatake, M., 349  
 Kitchens, J. L., 173  
 Klatzkin, G., 439  
 Klatt, R. W., 384  
 Klebanoff, S. J., 124  
 Keeman, C. R., 259-68; 259, 260, 261, 262, 263, 264, 266, 267  
 Kleihauer, E., 163, 164  
 Kleihauer, E. F., 161  
 Klein, E., 59, 61, 62, 63  
 Klein, L. A., 262  
 Kleinschmidt, W. J., 18, 19, 30, 34, 36  
 Kleisner, E. H., 399  
 Klemperer, M. R., 11  
 Klerman, G. L., 367, 369, 370, 372  
 Klesse, M. P., 385  
 Kilman, B., 78, 269, 270  
 Klineberg, J. R., 359  
 Klinkhamer, J. M., 107  
 Klionsky, B., 327  
 Klose, R. M., 76, 77, 80  
 Klotz, H. P., 101  
 Klotz, I. M., 165  
 Kmetec, E. P., 6  
 Kneubuhler, H. A., 225  
 Kniker, W. T., 5  
 Knittle, J. L., 229, 241, 242, 246  
 Knopf, R. F., 223, 224, 225, 233, 234, 250, 307  
 Knopp, A., 394  
 Knope, W. H., 384  
 Knox, F. G., 88, 270  
 Kobayashi, A., 201  
 Kobayashi, K., 375  
 Kobayashi, T., 375  
 Koch, E., 101  
 Koch, R., 337, 339, 340, 352  
 Kochwa, S., 154, 191, 293  
 Koehler, J., 30  
 Koffler, D., 7, 13  
 Kohler, K., 19, 19  
 Kohler, P. F., 11  
 Köhlin, P., 320

- Kohn, G., 399  
 Kohn, N. N., 357, 358  
 Kohner, P., 102  
 Kohno, M., 18  
 Kohno, S., 18  
 Kotw, E., 78, 79  
 Kolafat, T., 173  
 Koler, R. D., 158, 159  
 Koller, P. C., 379, 396  
 Kolodny, E. H., 330, 331  
 Komliya, Y., 201  
 Komrower, G. M., 342  
 Kono, R., 19  
 Kono, Y., 18, 20, 21, 24, 25  
 Kontos, H. A., 275  
 Kontras, S. B., 125  
 Kopf, A. W., 62  
 Koprowski, H., 19  
 Kosaka, K., 219, 223, 226  
 Kosenow, W., 381, 399  
 Koslowe, T. C., 106  
 Kosmicki, B., 112  
 Kostage, S. T., 117  
 Kostianovsky, M., 310  
 Kotler, S., 396, 397, 398  
 Koulischer, L., 380, 383, 384, 385, 386, 382, 393, 394  
 Koumans, J. H., 243, 251  
 Kovacs, A., 195  
 Koyama, S., 166  
 Koyama, T., 201  
 Kozikowski, E. H., 18, 29, 30  
 Kozlova, I. A., 33  
 Kraft, A. R., 313  
 Kraft, S. C., 281, 291  
 Kraicer, P. F., 223  
 Krakoff, I. H., 384, 436, 437, 438  
 Kramer, J., 204  
 Kramer, K., 89  
 Kramer, N. C., 6  
 Krasnobrod, H., 107  
 Kraus, F. W., 289  
 Krauss, S., 380, 381, 385, 386  
 Kravitz, B., 399  
 Krc, J., 441  
 Krecke, H. J., 134  
 Kreimer-Birnbaum, M., 184  
 Kreisberg, R. A., 243, 244, 245, 250, 253  
 Kremer, W. B., 381  
 Kristensen, M., 52  
 Krivit, W., 138, 395  
 Krompotic, E., 384, 385, 390  
 Krouse, H. A., 235  
 Kruger, F. A., 232  
 Kuah, K. B., 139, 140  
 Kitchel, O., 83, 86, 93  
 Kuhn, I. N., 148, 152  
 Kuhn, W., 77  
 Kulczycki, L. L., 99, 100, 101  
 Kulka, P., 106  
 Kumada, M., 201  
 Kumatori, T., 385  
 Kundel, D. W., 384, 386  
 Kunert, H., 202  
 Kunkel, H. G., 7, 13  
 Kurtzman, N. A., 92  
 Kusano, N., 203  
 Kuse, R., 149  
 Kuske, T. T., 256  
 Kilstner, H., 187  
 Kutt, H., 52  
 Kuzell, W. C., 105  
 Kunya, T., 219, 223, 226, 227, 310  
 Kwaan, H. C., 109  
  
 L  
 Lab, M., 35  
 Labarre, J., 299  
 Labat, J. A., 310  
 Laba, J. C., 226  
 Labie, D., 161, 163, 175  
 Laborit, H., 55  
 Labzoffsky, N. A., 204  
 Lachman, P. J., 10  
 Lack, C. H., 105  
 Lackovic, V., 18, 27  
 Lacy, P., 310  
 Lafontaine, J., 32  
 Lafourcade, J., 395  
 Lagrue, G., 10, 14  
 Lagunoff, D., 105, 114, 115, 291  
 Lahey, M. E., 395  
 Lalone, R. C., 75, 76, 87  
 Lam, G. T., 184  
 Lamb, D., 124  
 Lamb, G. A., 203  
 Lambert, A. M., 342, 350  
 Lambert, P. H., 7  
 Lammerant, J., 273  
 Lampert, F., 388, 389, 391  
 Lampson, G. P., 18, 19, 20, 21, 22, 26, 36  
 Lancaster, B. A., 111  
 Lancetremere, R. G., 275  
 Landin, L. M., 435  
 Landing, B. H., 346  
 Landy, M., 28  
 Lane, C. E., 72  
 Lange, B., 399  
 Lange, C. F., Jr., 4  
 Lange, G., 54  
 Lange, K., 7, 10  
 Langgard, H., 110  
 Langston, J., 271  
 Lannoo, R., 209  
 Lansford, E. M., Jr., 439  
 Lanzkowsky, P., 137  
 Laor, Y., 61  
 Lapey, J. D., 123  
 Laragh, J. H., 78, 79, 86, 266, 276  
 Larbre, F., 138  
 Larkander, O., 371  
 Larke, R. P. B., 17, 19, 31, 32, 35, 36  
 Larsen, A. E., 7  
 Larson, V. M., 31, 36  
 Lash, E., 436  
 Last, F. T., 18, 19  
 Laster, L., 327  
 Laszlo, J., 172  
 Loughton, N. B., 299  
 Leulier, D. P., 260  
 Lavelle, G. C., 24, 28  
 Law, L. W., 28, 31, 32, 36, 214  
 Lawecki, J., 243  
 Lawler, S. D., 381, 382, 383, 384, 392, 393, 394  
 Lawrence, A. M., 252, 306  
 Lawrence, H. S., 4  
 Lawrie, D. M., 48  
 Lawson, D. H., 139  
 Lawson, H. D., 276, 277  
 Lawton, A. R., 290  
 Laxdal, T., 124  
 Layrisse, M., 147, 151, 152  
 Lazarus, G. S., 122  
 Lazarus, L., 225, 226, 274, 303, 304, 305, 309  
 Lazarus, N. R., 301  
 Lazara, R., 46, 49, 51, 52  
 Leach, B. E., 77, 86  
 Leaf, A., 264  
 Leatham, A., 54  
 Lebacqz, E., 234  
 Lebermann, F., 67  
 Leblanc, J., 110  
 Lebovitz, H. E., 227, 229, 230, 235  
 Lecomte, J., 68  
 Ledy, J. P., 138  
 Lederich, J. K., 55  
 Ledsome, J. R., 85  
 Leduc, C., 140  
 Lee, C. S. N., 380, 386, 394  
 Lee, E. H., 187  
 Lee, H. A., 138  
 Lee, L., 138  
 Lee, S. H. S., 23  
 Lee, S. L., 385  
 Lee, Y., 339, 340, 352  
 Leeksa, C. H. W., 394  
 Leeper, R. D., 434, 435, 437, 439, 441  
 Legrand, E., 397  
 Leh, P. C., 18, 19, 29, 30

- Lehmann, H., 157, 159, 161,  
 162, 163, 165, 166, 167,  
 168, 171, 172, 173  
 Leighninger, D. S., 49  
 Lein, A., 233  
 Lejeune, J., 379, 395  
 Lelong, M., 138, 201  
 Lemieux, B., 339  
 Lepow, I. H., 105, 115,  
 116  
 Lerner, R. A., 3, 4  
 Lerner, R. L., 233  
 Lesage, A. M., 272  
 Lesch, M., 348  
 Lessof, M. H., 253  
 Le Tan, V., 138  
 Letsky, E., 13  
 Leván, A., 379, 380, 383,  
 389, 392, 397, 399  
 Leventhal, B. G., 437, 438,  
 439, 440, 441  
 Leventhal, M., 110  
 Lever, A. F., 81, 82, 83,  
 84, 91, 139  
 Lever, J. D., 311  
 Levin, A. G., 124  
 Levin, A. S., 11  
 Levin, B., 338, 343,  
 344  
 Levin, M. E., 313  
 Levin, R. H., 390  
 Levin, W. C., 172, 383, 399,  
 400  
 Levine, N., 274  
 Levine, S., 24, 33  
 Levine, V. L., 300  
 Levinsky, N. G., 75, 76, 87,  
 270  
 Levy, D. A., 195  
 Levy, H. B., 17, 18, 19, 20,  
 28, 29, 30, 31, 32, 33, 36,  
 37, 214  
 Levy, J. P., 31, 32, 36,  
 209  
 Levy, I. J., 227  
 Levy, M. N., 111, 112, 113,  
 270  
 Lewis, E. J., 4  
 Lewis, F. J. W., 381,  
 399  
 Lewis, G. P., 109, 111, 112,  
 113  
 Lewis, J. P., 384, 385  
 Lewis, K. M., 9  
 Lewis, S. M., 134  
 Lewis, T., 67  
 Lewison, E. F., 396, 397  
 Lewitt, J. F., 10  
 Lewy, J. E., 90, 271  
 Leyssac, P. P., 91  
 Richardus, B., 89  
 Lichtenstein, L. M., 195  
 Lichtenstein, N., 434,  
 438  
 Lichtman, M. A., 141  
 Lida, E. J., 399  
 Liddle, G. W., 83, 86,  
 93, 276  
 Lieb, H., 319  
 Lieberman, E., 137, 337  
 Lieberman, F. L., 275  
 Lieberman, M., 18, 20  
 Lieberman, N. A., 51  
 Lieberman, S., 78, 79,  
 86  
 Lieberman, A. D., 52  
 Liebowitz, M. R., 272  
 Lillibridge, C. B., 101  
 Lilljequist, A.-Ch., 346  
 Lim, R. K. S., 70  
 Lind, K., 204  
 Lindahl, O., 69  
 Lindberg, L. H., 12  
 Linden, R. J., 85  
 Lindenmann, J., 17  
 Lindheimer, M. D., 76  
 Lindholm, L., 211  
 Lindquist, B., 336, 337, 338,  
 349  
 Lindquist, R. R., 9  
 Lindsao, L., 340, 341  
 Lindsay, D. A., 162  
 Lindsay, H. L., 37  
 Lindsay, M., 293  
 Lines, J. G., 159  
 Linton, A. L., 139  
 Lippes, J., 283, 290  
 Lipton, S., 437, 438  
 Lish, P. M., 105  
 Lisker, R., 173  
 Litt, M., 117, 120  
 Little, B., 274  
 Liu, C., 180, 183  
 Liu, S. M., 114  
 Lloyd, A. G., 114  
 Lloyd, J. K., 335, 344  
 Lo, R., 109  
 Lobeck, C. C., 102  
 Lockart, R. Z., Jr., 17,  
 22, 23, 25, 27, 33  
 Lockett, M. F., 77  
 Lockhart, L. H., 103, 104,  
 345  
 Loeb, E., 434, 437, 439,  
 440, 441  
 Loeb, T., 70  
 Loew, E. R., 299  
 Loftus, J., 399  
 Logan, G., 106, 108, 110,  
 119  
 Logan, W. S., 103, 104  
 Loiseau, E., 155  
 Lonsdale, D., 346, 395  
 Lorentsson, R., 341,  
 342  
 Loria, A., 173  
 Loridan, L., 344, 345  
 Lorincz, A. L., 67  
 Lorkin, P. A., 161, 162,  
 163, 166, 167  
 Louis, L. H., 232  
 Louis, S., 52  
 Louis, W. J., 91  
 Louro, J. M., 380,  
 386, 394  
 Love, D. L., 341, 342  
 Lovelace, E., 399  
 Löw, B., 392  
 Lowe, R. D., 85  
 Lown, B., 47, 48, 50, 51,  
 53, 56  
 Lowrie, E. G., 230  
 Lowry, O. H., 114  
 Lu, Y. K., 18  
 Lubs, H. A., 380, 396, 397,  
 398  
 Lucchi, R., 161  
 Luce, J. K., 381  
 Luchi, R. J., 49, 50  
 Ludany, G., 113  
 Ludwig, A. S., 398  
 Luers, T. H., 380, 386,  
 390  
 Luft, R., 231, 233  
 Lukás, B., 18  
 Luke, C. G., 146, 147,  
 154  
 Luke, R. G., 229  
 Lukert, B. P., 243  
 Lund, E., 211  
 Lunde, M. N., 204, 205,  
 210, 212  
 Lurie-Blitman, S., 380  
 Lustik, B., 227  
 Lutsky, I. I., 183  
 Lutzenko, N. M., 109  
 Lycke, E., 211  
 Lykics, A. W. J., 107,  
 121  
 Lynch, E. C., 140  
 Lyngsøe, J., 245

## M

- Macadam, R. F., 139  
 Macallum, A. B., 299  
 MacBryde, C. M., 241  
 MacCallum, F. O., 17,  
 64  
 Macchia, V., 327  
 Macdiarmid, W. D., 392,  
 393  
 MacDonald, R. A., 154  
 MacGillivray, M., 293  
 MacGillivray, M. H., 231  
 Machlin, L., 226  
 Mackaness, G. B., 208,  
 210  
 Mackay, I. R., 399, 400  
 Mackay, I. S., 227, 310  
 MacKenzie, I., 27  
 Mackenzie, J. W., 273  
 MacLachlan, M. J., 360  
 MacLellan, A., 434, 437,  
 439, 440, 441  
 Macleod, J. K., 300  
 Macmormine, D. R. L., 122  
 MacTaggart, M., 399  
 Maddison, T. G., 343,  
 344  
 Madison, J. F., 63

- Madison, L. L., 224, 299, 304, 307  
 Madras, B., 435, 436, 440  
 Maehara, N., 28  
 Maffezzoli, R., 224, 250  
 Magee, W. E., 33  
 Mager, M., 220  
 Mahabir, R. N., 9  
 Maher, F. T., 275  
 Mahler, R., 225  
 Mahoney, J. H., 260, 263  
 Maier, P., 187  
 Maillard, J. L., 12  
 Maizels, M., 167  
 Maj, S., 394  
 Majno, G., 106, 106, 110, 111  
 Makino, S., 380, 396, 397, 398, 399  
 Malaisse, W. J., 226, 307, 311  
 Malaisse-Lagae, F., 226, 307, 311  
 Malawista, S. E., 70, 106, 123, 124, 358, 359, 362, 363, 364  
 Maley, E., 272  
 Malleson, A., 374  
 Malmquist, J., 112, 113  
 Manchew, R. J., 184  
 Mancici, G., 282  
 Mancinelli, S., 399  
 Mandel, W. J., 51  
 Mandell, A. J., 375  
 Mandras, A., 204  
 Manis, J. G., 148, 149  
 Mann, J. J., 293  
 Mannhart, M., 328  
 Manning, G., 434  
 Marcellino, L. R., 396, 398  
 Marchetti, V. T., 106, 110  
 Marcq, M., 234  
 Marcus, P. I., 25, 33  
 Mardiney, M. R., 119  
 Margolis, J., 70  
 Margolis, S., 289  
 Markham, J. W., 69, 70  
 Markowitz, A. S., 3, 4  
 Marks, J. E., 18, 19  
 Marks, J. F., 348, 349  
 Marks, L. J., 262  
 Marks, V., 224, 225, 234, 245, 301, 308, 309, 313  
 Marliss, E., 250  
 Marmion, B. P., 180, 183  
 Marri, G., 224, 225, 301, 308, 309  
 Marsden, C. D., 91  
 Marsh, G. W., 134  
 Marsh, J. C., 399  
 Marshall, R. D., 435  
 Marshall, R. M., 56  
 Martenet, A. C., 209  
 Martensson, E., 327, 328  
 Marti, H. R., 162, 164  
 Martin, E. M., 33  
 Martin, H., 380, 384, 386, 390, 394  
 Martin, J. M., 231  
 Martineau, M., 396  
 Martinez, C., 52, 152  
 Martinez-Maldonado, M., 92, 265, 266  
 Martinez-Tello, F. J., 289, 290  
 Martino, J. A., 87, 271  
 Martz, G., 209  
 Marver, H. S., 347  
 Mashburn, L. T., 434, 435, 437, 438  
 Masler, L., 18  
 Mason, D. T., 274  
 Masson, G. M. C., 78  
 Masson, P. L., 284, 290  
 Massey, S. G., 262, 263, 264  
 Masumi, R. A., 54  
 Mastrangelo, R., 380, 386, 390  
 Masuda, K., 201  
 Masukawa, T., 396, 397  
 Matalon, R., 324, 328  
 Mathé, G., 138, 437  
 Mathias, A. P., 71  
 Matisova, E., 34  
 Matsubayashi, H., 210  
 Matsuya, Y., 322  
 Matthews, M. E., 227  
 Mattison, G., 396, 398  
 Mauck, H. P., 275  
 Maurer, H., 373  
 Maurer, P. H., 292  
 Mauss, H. J., 149  
 Maxwell, J. D., 336  
 Maxwell, M. H., 259, 260  
 Mayer, J., 241  
 Mayer, M. M., 115, 118  
 Mayet, F., 151  
 Mayhew, D., 307  
 Mayne, J. G., 363  
 Mays, V. B., 324  
 Mazur, A., 154  
 Mazzarella, L., 170  
 McAdams, A. J., 7, 11  
 McBean, M. S., 340, 341  
 McBride, J. A., 137, 140, 141, 380, 381, 384, 389, 390, 391  
 McCall, M. S., 299  
 McCance, R. A., 145, 242  
 McCarthy, M., 437, 438, 439, 440  
 McCarty, D. J., 357-66; 70, 71, 106, 357, 358, 359, 360, 361, 362, 363, 364  
 McClean, M. M., 138  
 McCloskey, R. V., 30, 34, 35  
 McCloy, R. M., 275  
 McClure, D. J., 375  
 McClure, P. D., 390  
 McCluskey, J. W., 120  
 McCluskey, R. T., 4, 10, 14, 105, 119, 120, 140, 183  
 McComb, D. E., 204  
 McCombs, M. L., 103, 104  
 McConville, J. M., 11, 12  
 McCormick, G. J., 229  
 McCoy, T. A., 433  
 McCrory, W., 137  
 McCubbin, J. W., 82, 84, 93  
 McCulloch, H., 62  
 McCusker, J., 81  
 McFadzean, A. J. S., 109  
 McFarland, V. W., 332  
 McFarland, W., 117  
 McFarlin, D. E., 289  
 McGavran, M. H., 212, 313  
 McGee, B. J., 381, 382, 384  
 McGillvray, E., 380, 386, 390  
 McGuigan, J. E., 303, 312, 313  
 McGuire, J. M., 19  
 McIntosh, J., 206  
 McIntosh, R., 159  
 McIntyre, N., 225, 301, 307, 308, 309, 311  
 McIntyre, O. R., 394  
 McKay, D. G., 137  
 McKean, C. M., 339  
 McKee, L. C., 385  
 McKendrick, T., 102  
 McKenzie, G. J., 49  
 McKerrlie, M., 37  
 McKiddie, M. T., 229, 231  
 McKusick, V. A., 231, 341, 342  
 McMinn, R. M. H., 65  
 McMurray, W. C., 343  
 McMurry, J. S., 123  
 McNair, S. L., 350  
 McNally, E. M., 54  
 McNay, J. L., 274  
 McNichol, G. P., 139  
 McPhaul, J. J., Jr., 3, 4  
 McRipley, R. J., 124

- McSherry, N. R., 102  
 McVicar, M., 7  
 Meade, R. C., 225  
 Meakin, J. W., 231  
 Meale, T. D., 210  
 Mebane, D., 224  
 Mécs, E., 33  
 Medearis, D. N., 19, 28  
 Medley, D. R. K., 141  
 Medrano, G. A., 55  
 Meehan, J. P., 261, 262  
 Meekan, J. P., 86  
 Meuwisse, G., 336, 337, 338, 349  
 Megyesi, C., 304, 308  
 Mehl, E., 323  
 Melkdiejohn, G., 179  
 Meisler, A., 162, 164, 166  
 Meister, A., 435, 436, 440  
 Melani, F., 243  
 Mellbin, T., 192  
 Mellman, W. J., 103, 337, 344, 399  
 Mellors, A., 115, 118  
 Mellors, R. C., 4, 7  
 Melmon, K. L., 51, 52, 71, 112, 361  
 Melnick, J. L., 27  
 Melnikova, L. A., 33  
 Melton, M. L., 201, 202, 213  
 Melton, R. M., 67  
 Mendel, G. A., 149, 150  
 Mendels, J., 370, 372, 374  
 Mendelson, J., 24, 28  
 Mendes, F. T., 390  
 Mendilaharsu, F., 137, 138  
 Mendilaharsu, J., 137, 138  
 Mengel, C. E., 348  
 Menkes, J., 339  
 Menkin, V., 105  
 Menzel, A. E. O., 198  
 Mercer, E. N., 51, 52  
 Mercer, R. D., 345, 346, 395  
 Mereu, T., 340  
 Mereu, T. R., 233  
 Mergenhausen, S. E., 119, 292  
 Merigan, T. C., 17-46; 17, 18, 19, 20, 21, 22, 24, 25, 26, 28, 29, 30, 33, 34, 35, 36, 37, 208, 210, 212, 213, 214  
 Merimee, T. J., 224, 226, 231, 243, 250, 252, 307  
 Merker, H., 380, 383, 385, 394  
 Merrill, A. J., 274  
 Merrill, D. A., 282, 289  
 Merrill, J. P., 9, 12, 13, 229  
 Messinetti, S., 396, 398  
 Metcalf, J., 159  
 Metz, D. H., 33  
 Metz, J., 139  
 Metz, P., 299  
 Metzger, B. E., 219  
 Metzger, M., 210  
 Meuwissen, H. J., 293  
 Meyer, B., 23  
 Meyer, F., 373  
 Michael, A. F., 3, 4, 9, 10, 14, 350  
 Michaels, B. S., 24  
 Michaels, R. H., 18, 283  
 Michels, W. A., 114  
 Michl, H., 71  
 Mierzwiak, D. S., 52  
 Miescher, P. A., 9, 105  
 Mietkeiwski, E., 112  
 Migeon, B. R., 22  
 Migeon, C. J., 252  
 Mihaesco, E., 287  
 Milash, G. P., 109  
 Mildvan, D., 106  
 Mile, E., 209  
 Miles, A. A., 106  
 Miles, B., 344  
 Miles, C. P., 396, 397, 398, 399  
 Milgrom, F., 6  
 Milgrom, H., 59, 61  
 Milhail, G. R., 114  
 Millard, R. E., 383, 392, 393, 399  
 Miller, A. J., 272  
 Miller, D. G., 70  
 Miller, D. R., 123  
 Miller, G., 344  
 Miller, G. G., 48  
 Miller, H. I., 256  
 Miller, H. K., 434, 435, 436, 440  
 Miller, J., 348  
 Miller, M. J., 202, 205, 206  
 Miller, N. L., 202  
 Miller, O., 380, 386, 390  
 Miller, O. V., 33  
 Miller, R., 273  
 Miller, R. B., 14  
 Miller, R. H., 8  
 Miller, R. W., 395  
 Miller-Milinska, A., 114  
 Milliez, P., 10, 14  
 Mills, I. H., 75-98; 75, 77, 78, 79, 82, 83, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95  
 Milne, C. M., 293  
 Milne, G. W. A., 338, 339  
 Mims, C. A., 24, 35  
 Minden, P., 191  
 Miner, N. A., 30  
 Minkowitz, S., 7  
 Minnich, V., 172  
 Mintz, S. S., 48  
 Mirick, G. S., 185  
 Mishizawa, E. E., 109  
 Mitani, M., 381, 388, 389, 391  
 Mitchell, J. H., 52  
 Mitchell, M. S., 441  
 Mitra, B., 55  
 Mitus, W. J., 380, 381, 385, 386, 388, 389, 390, 391, 392, 394, 395, 399  
 Miura, A. B., 140  
 Miwa, T., 392  
 Miyaji, T., 159, 166, 167, 172  
 Miyakawa, H., 201  
 Miyake, I., 201  
 Miyata, A., 201, 203  
 Mize, C. E., 338, 339  
 Mlynaryk, P., 252  
 Mock, M. B., 324, 325  
 Moe, G. K., 49, 50  
 Moellering, R. C., Jr., 48  
 Moghadam, M. A., 390  
 Mohler, D. N., 141  
 Mohyuddin, F., 343  
 Mollison, P. L., 139  
 Moloney, W. C., 380, 386, 390, 394, 395  
 Monaghan, E. A., 124  
 Moncrieff, A., 340  
 Mondzac, A. M., 161  
 Mongin, M., 379, 390  
 Monn, E., 161  
 Monnens, L., 137, 138  
 Monod, J., 22  
 Monroe, M. L., 243  
 Monroe, W. M., 133  
 Monsen, E. R., 148  
 Montague, W., 307  
 Monto, R. W., 124  
 Montreuil, J., 284  
 Moon, H. D., 117  
 Moore, C. V., 151, 152  
 Moore, F. T., 313  
 Moore, G. E., 396  
 Moore, R. D., 31  
 Moore, W. M. O., 162  
 Moores, R. R., 161  
 Moorhead, J. F., 138  
 Moorhead, P. S., 399  
 Mora, P. T., 332  
 Moran, J. M., 51  
 Moran, N. C., 114  
 Moran, W. H., 262  
 Morard, J. C., 14  
 Mordhorst, C. H., 29, 30  
 Moreno, H., 123  
 Moretti, G., 399  
 Morgan, A. P., 220, 249, 250, 254, 255, 256  
 Morgan, C., 289, 290  
 Morgan, H. R., 31  
 Morikawa, T., 344



- Morimoto, H., 159  
 Morley, J. S., 300  
 Morrelli, H. F., 52  
 Morris, R., 301  
 Morris, R. H., 140  
 Morrison, J. L., 274  
 Morrow, A. G., 50,  
 274  
 Morrow, G., III, 343, 344,  
 346  
 Morsing, C., 371  
 Morton, H. E., 184  
 Moschowitz, E., 140  
 Moser, H. W., 343, 344  
 Moses, J. M., 109, 116, 119,  
 122  
 Moehang, T., 227  
 Moskowitz, R. W., 105  
 Mota, I., 105, 111, 113,  
 114  
 Motokawa, Y., 159  
 Motomura, I., 201, 203  
 Motulsky, A. G., 163, 167,  
 173  
 Moulmier, J., 399  
 Mounsey, J. P. D., 48  
 Mountain, I. M., 438  
 Mouri, T., 140  
 Mouriquant, C. L., 138  
 Movat, H. A., 122, 124  
 Movat, H. Z., 110, 122  
 Mudd, S. H., 341, 342  
 Muelheims, G. H., 272  
 Muftuoglu, A., 9  
 Muirhead, E. E., 77,  
 88  
 Muirhead, H., 168, 169,  
 170  
 Mukhamedzhanov, I. A., 109  
 Mukhopadhyay, D., 345  
 Muldal, S., 384  
 Muldowney, F. P., 272  
 Mulholland, J. H., 276  
 Mull, J. D., 123  
 Muller, C. J., 162  
 Muller, H. K., 113  
 Müller-Eberhard, H. J., 10,  
 11, 12, 13, 115, 118  
 Mullet, S., 284  
 Mullins, F., 101  
 Munck, O., 90, 91  
 Munro, J. A., 79  
 Munthe-Kasse, A. W., 339  
 Muratore, R., 379, 390  
 Murawski, E., 159  
 Murphy, B., 252  
 Murphy, E. B., 18, 19, 30,  
 36  
 Murphy, F. A., 8  
 Murphy, G. E., 367,  
 369  
 Murphy, L., 437, 438, 439,  
 440  
 Murray, M. J., 146  
 Murray, R. K., 122  
 Muschel, L. H., 119  
 Musci, I., 18, 19  
 Mustard, J. F., 109, 122  
 Muto, T., 201  
 Mutt, V., 300, 301  
  
 N  
 Nabseth, D. C., 262  
 Nadel, R. S., 61  
 Nadler, H. L., 338  
 Naeverson, M. A., 55  
 Naff, G. B., 362  
 Nagano, Y., 26, 28  
 Nagao, Y., 375  
 Nagel, G., 436, 440  
 Nagel, R. L., 159, 161,  
 173  
 Nagel, W., 61  
 Nagy, S., 114  
 Nahrwold, D. L., 304  
 Nakabayashi, T., 201,  
 203  
 Nakagawa, H., 342, 347  
 Nakano, M., 28  
 Nakao, K., 226  
 Nakao, T., 349  
 Nakatsui, T., 380, 383, 384,  
 385, 389, 391  
 Narayanan, V. L., 300  
 Nathan, N., 363  
 Nechtman, C. M., 172  
 Neely, C. L., 381  
 Nell, V. P., 11  
 Nelson, D. A., 136, 137  
 Nelson, D. H., 76  
 Nelson, J. K., 226, 227, 243,  
 252, 310  
 Nelson, N. C., 226, 310  
 Nelson, R. A., Jr., 12  
 Nemes, M. M., 18, 19, 20,  
 22, 26, 36  
 Nestel, P. J., 256  
 Neu, H. C., 209  
 Neubauer, A., 384  
 Neubauer, R. H., 31, 32,  
 36  
 Neuberger, C. W., 394  
 Neuberger, A., 435  
 Neufeld, E. F., 322  
 Neuman, J., 53  
 Neuman, R. E., 433  
 Neumann, W., 71  
 Neville, R. W., 228  
 Newberg, P., 339, 340,  
 352  
 Newcomb, R. W., 234, 286,  
 287  
 Newman, L. J., 115,  
 116  
 Newman, P. R., 231  
 Newton, J. D., 230  
 Nezelof, C., 138  
 Ng, M. H., 18, 20, 21, 25,  
 33  
 Ngu, V. A., 399  
 Nichols, R. T., 204  
 Nichols, W. W., 184, 380,  
 383, 392  
 Nicholson, W. E., 304  
 Niederalt, G., 385, 399  
 Niemark, H., 211, 213  
 Niewiarowski, S., 139  
 Nignone, R., 272  
 Nukulin, A., 111, 112,  
 113  
 Nilsson, L., 152  
 Nilsson, S. B., 392  
 Nizet, A., 89, 90  
 Noda, H., 201, 203  
 Nolan, J. P., 106, 107  
 Nomura, T., 159, 160  
 Nonaka, K., 311  
 Noonan, S. M., 120  
 Norden, A., 380, 383,  
 392  
 Normansell, D., 284, 286,  
 287  
 Norrby, R., 211  
 Norris, R. M., 55  
 Northover, B. J., 111  
 Northrup, R., 284  
 Northway, J. D., 7, 11  
 Norton, J. B., 349  
 Notterman, R. F., 395  
 Novikoff, A. B., 121  
 Novy, M., 159  
 Nowaczynski, W., 78,  
 79  
 Nowell, P. C., 379, 380,  
 381, 390, 392, 393, 394,  
 396  
 Nuetzel, J. A., 245  
 Nurse, D. S., 65  
 Nuss, G. W., 106  
 Nussenzweig, R., 29, 30,  
 213  
 Nuwer, M. R., 28, 37  
 Nyhan, W. L., 343, 344, 346,  
 348  
 Nyhus, L. M., 153  
  
 O  
 Oates, J. A., 112, 113  
 Obenour, W., 172  
 Oberholzer, V. G., 338, 343,  
 344  
 O'Brien, D., 344  
 O'Brien, F. J., 275  
 O'Brien, J. R. P., 150  
 O'Brien, J. S., 329, 330,  
 331  
 Ochoa, M., 209  
 Öckerman, P. A., 320  
 O'Connor, W. J., 85  
 Oerther, F., 92  
 Oetting, H. F., 434, 435,  
 436, 437, 438, 439, 440,  
 441  
 O'Flynn, M., 340  
 Ogawa, M., 191  
 Ogg, G. J., 371  
 Ogilvie, B. M., 192  
 Ogilvie, R. F., 229  
 Ogra, P. L., 288, 293, 294

- Ogra, S. S., 283, 290  
 O'Grady, D., 339, 340  
 Oh, J. O., 30, 35  
 O'Hara, D. D., 227  
 Ohba, Y., 172  
 Ohmeda, A., 224, 225, 308,  
 309, 310, 440  
 Ohno, R., 441  
 Ohno, S., 381  
 Ohnuki, Y., 399  
 Ohnuma, T., 434, 436,  
 440  
 Ohta, Y., 161  
 Ohya, I., 161  
 Oi, R., 140  
 Oie, H. K., 18, 19, 29,  
 30  
 Okada, A., 34  
 Okada, K., 380, 383, 384,  
 385, 389, 391  
 Okada, S., 329, 330,  
 331  
 Okazaki, H., 26  
 Okuchi, K., 389, 391  
 Old, L. J., 434, 435, 436,  
 437, 439, 440, 441  
 Oldstone, M. B. A., 8  
 Olichney, M. J., 269, 270,  
 272  
 Oliver, M. F., 48  
 Oliver, W. J., 276, 344  
 Olmer, J., 379, 390  
 Olsen, E., 48  
 Olsen, N. S., 245  
 Olsson, Y., 105, 113  
 Omran, K. F., 283  
 Ondetti, M. A., 300,  
 361  
 O'Neill, F., 399  
 Onesti, P., 379, 380, 381,  
 384, 386, 389, 394  
 Onodera, S., 140  
 Opfeil, R. W., 162, 167  
 Opie, E. L., 107, 108  
 Opie, L. H., 245  
 Oppenheim, J. J., 124, 388,  
 391, 392  
 Oppenheimer, E. H., 100  
 Oran, S., 55  
 Orange, R. P., 122,  
 196  
 Oratz, M., 276  
 Orcl, L., 312  
 O'Reilly, I. G., 232  
 O'Reilly, M. J., 209  
 Organick, A. B., 183  
 Orloff, J., 271  
 Ormal, S., 28, 214  
 Orrell, D. H., 232  
 Orskov, H., 222  
 Ortega, L. G., 4  
 Orth, D. N., 304  
 Ortman, P., 223  
 Orzalesi, M. M., 102  
 Osbaldiston, G. W., 86, 89,  
 90, 92  
 Osborn, J. E., 19, 28  
 Osborne, J. A., 51, 52  
 Osgood, E. E., 158, 159  
 O'Shea, M., 138  
 Oskil, F. A., 163, 165,  
 173  
 Osler, A. G., 195  
 Osterberg, K., 209  
 Ota, F., 34  
 Otsuka, K., 86  
 Ottosson, J.-O., 371  
 Oudart, J. L., 161  
 Overall, J. E., 372,  
 373  
 Owen, E. O., 249, 250, 254,  
 255, 256  
 Oxman, M. N., 31, 32  
 Oyanagi, K., 349  
 Oyvin, I. A., 109  
 Ozere, R. L., 23  
  
 P  
 Packham, M. A., 109  
 Padawer, J., 105, 113  
 Padeh, B., 380  
 Page, A. R., 11, 12, 115,  
 116, 123, 124  
 Page, I. H., 62, 84,  
 93  
 Pages, A., 137  
 Pagnier, J., 161  
 Palade, G. E., 5, 110, 111,  
 291, 310  
 Palme, G., 380  
 Palmer, A. J., 275  
 Palmer, P., 109  
 Palmer, R. H., 108  
 Palmer, T., 344  
 Paloyan, E., 301  
 Pannacciulli, I. M., 154  
 Papadimitriou, J. M., 106,  
 111, 119, 120  
 Papaionnou, A., 138  
 Papper, S., 275  
 Papy, M. C., 390  
 Papy-Jurion, M. C., 379  
 Parada, E., 308, 309, 310,  
 440  
 Parer, J. T., 163  
 Park, B. H., 124  
 Park, J. H., 25, 29, 30,  
 36  
 Parker, M. L., 231  
 Parker, R. A., 84  
 Paronetto, F., 10  
 Parriah, A. E., 6  
 Partin, J. C., 123  
 Partington, M. W., 348,  
 349  
 Pascale, A., 18, 20  
 Pastan, I., 245, 327  
 Patabiraman, T., 323  
 Patchefski, A. S., 395  
 Pattee, C. J., 245, 252  
 Patterson, J. H., 349  
 Patterson, J. L., 275  
 Patterson, M. K., Jr.,  
 435, 436  
 Patterson, R., 192  
 Patterson, R. B., 345  
 Pattison, I. H., 29  
 Patton, W. D. M., 111  
 Pauker, K., 17, 27  
 Paulsen, E. P., 243  
 Pavlatos, F. C., 228,  
 243  
 Pawa, R. R., 336  
 Pawan, G. L., 232  
 Pawelski, S., 394  
 Payne, W. W., 440  
 Paz, R. A., 105, 108, 108,  
 120  
 Pearce, I. A., 7  
 Pearce, J. W., 89  
 Pearson, H., 395  
 Pearson, J., 31, 32  
 Pearson, W. N., 150  
 Peart, W. S., 91  
 Pedersen, B., 380, 382,  
 384  
 Pegoraro, L., 385  
 Pegrum, G., 381  
 Pek, S., 250, 307  
 Pelluffo, E., 138  
 Penner, J. A., 159  
 Pennington, V., 373  
 Penny, R., 363  
 Pensuwan, S., 233, 234  
 Pentecost, B. L., 48  
 Pentycross, C. R., 392  
 Percy, A. K., 323  
 Perez-Bercoff, R., 18, 20,  
 21, 25  
 Perez-Moreira, L., 202  
 Perheentupa, J., 343  
 Perles, J., 31, 32  
 Perillie, P. E., 106, 107,  
 123  
 Perkoff, G. T., 230  
 Perley, M. J., 221, 228, 231,  
 233, 243, 244, 249, 309  
 Perlmutter, A. D., 101  
 Perlooth, M. G., 347  
 Perona, G., 394  
 Perry, S., 385  
 Perry, T. L., 341, 342  
 Perutz, M. F., 159, 165,  
 168, 169, 170, 172  
 Peternel, W. W., 147  
 Peters, A., 384  
 Peters, N., 232  
 Peterson, M. L., 241, 336,  
 337  
 Peterson, N. A., 339  
 Peterson, O. L., 185  
 Peterson, O. P., 33  
 Peterson, R. E., 78, 79,  
 269, 270  
 Peterson, R. G., 434, 436,  
 437, 438, 439, 440, 441  
 Petralli, J. K., 19, 29, 30,  
 37  
 Petrovici, A., 30  
 Pettinger, W., 112, 113

- Petz, L., 13  
 Pfeiffer, E., 311  
 Pfeiffer, E. F., 243  
 Pfeiffer, R. A., 381, 390, 395, 399  
 Pfeiffer, R. I., 209  
 Phelps, P., 71, 357, 361, 362, 363, 364  
 Phibbs, R. H., 138  
 Phillips, F. S., 434, 435, 437, 439, 441  
 Phillips, D. C., 169  
 Phillips, L. I., 345  
 Pickering, G. W., 69, 91, 95  
 Pickering, R. J., 11, 12, 115, 119  
 Pickren, J. W., 396  
 Piel, C. F., 138  
 Pierce, A. E., 281, 294  
 Pierce, J. V., 109  
 Pierkaraki, G., 201  
 Pietot, R., 312  
 Pietschmann, H., 162  
 Pk, C., 162  
 Pileri, A., 385  
 Pillai, P. M., 350  
 Pincus, J. H., 346  
 Pincus, T., 5  
 Pindak, F. F., 30  
 Pineda, G., 339, 340  
 Pineo, G. N., 140  
 Pinera, B., 49  
 Pines, B., 111, 112  
 Pinkel, D., 438  
 Pinkerton, H., 209  
 Pinkerton, P. H., 161, 164, 167, 383  
 Pinkus, T., 138  
 Piper, P. J., 70  
 Pirani, C. L., 9  
 Pirzio-Biroli, G., 148, 149, 153  
 Pisciotta, A. V., 159  
 Pitcher, C. S., 155  
 Pittman, G. D., 367  
 Pitts, F. N., Jr., 369  
 Pitts, J. D., 322  
 Plante, M., 373  
 Plant, A. G., 283, 284  
 Plescia, O., 28  
 Pliny, F., 124  
 Pl-sunyer, F. X., 225  
 Pokorny, A. D., 372, 373  
 Polk, H. C., 313  
 Pollack, A. D., 5, 138, 341  
 Pollack, S., 146  
 Pollak, S., 344  
 Pollak, V. E., 9  
 Pollard, M., 29, 30  
 Pollarn, B., 124  
 Pollitt, R. J., 435  
 Polt, S. S., 205, 208  
 Pomeranz, B. H., 84, 271  
 Pomerat, C. M., 399  
 Pond, M. H., 252  
 Pool, P. E., 274  
 Pop, A., 30  
 Poplawski, A., 139  
 Porte, D., Jr., 219-40;  
 220, 221, 223, 224, 225,  
 226, 227, 228, 229, 232,  
 233, 234, 249, 310  
 Porter, D. D., 7  
 Porter, F. S., 345, 346  
 Porter, I. H., 397  
 Porter, K. A., 4, 9, 10  
 Porush, J. G., 271  
 Porzerwa-Tetmajer, A., 210  
 Post, R. S., 6  
 Postic, B., 17, 21, 23, 24, 25, 34, 35  
 Potter, J. L., 69  
 Potter, R. R., 259  
 Poucher, R., 223  
 Poulding, R. H., 381  
 Pourfar, M., 385  
 Powell, H. M., 19  
 Pozefsky, T., 254, 256  
 Prager, M. D., 434, 435, 436  
 Pranker, T. A. J., 167  
 Prato, V., 161  
 Pratt, C., 438  
 Pratt, P., 147  
 Prausnitz, C., 187  
 Prendergast, R. A., 284, 286, 288, 289, 290, 292  
 Preshaw, R. M., 300, 302, 306, 309  
 Pressman, B. C., 121  
 Pressman, D., 187  
 Preston, J., 300  
 Freud'Homme, J. L., 287  
 Price, D. C., 149  
 Price, J. W., 346  
 Price, S., 228  
 Price, W. H., 28  
 Priebat, M. K., 114  
 Prinzmetal, M., 95  
 Pritchard, J. A., 139, 259  
 Procacci, P., 67  
 Prockop, D. J., 361  
 Prokopowicz, J., 139  
 Propp, R. P., 140, 141  
 Prosser, P. R., 7  
 Prowse, K., 226, 227  
 Pruitt, A. W., 349  
 Pruzansky, J. J., 192  
 Pullan, J. M., 78  
 Pulvertaft, R. J. V., 117  
 Punnett, M., 103  
 Punturieri, E., 399  
 Pupo, A. A., 220, 221  
 Purcell, M. K., 171  
 Purcell, R. H., 288, 293  
 Pusztai, R., 18, 19  
 Pyenson, J., 361  
 Pyke, D. A., 233
- Q
- Quabbe, H. J., 252  
 Quagino, D., 384, 385  
 Quie, P. G., 121, 123, 124, 293  
 Quigley, H. J., Jr., 101  
 Quintara, N., 121  
 Quinton, W. E., 328  
 Quirk, J. M., 330
- R
- Raab, S. O., 106, 107  
 Raab, W. P., 114  
 Rabinowitz, D., 241-58;  
 224, 226, 229, 231, 243,  
 245, 248, 250, 252, 307  
 Rabson, A. S., 19, 22, 28,  
 29, 30, 31, 32, 36, 209,  
 212, 214, 399  
 Rader, B., 274  
 Rafai, S., 147  
 Ragins, H., 114  
 Raiha, N. C. R., 343  
 Raik, E., 162  
 Raith, L., 252  
 Rake, M. O., 141  
 Rakieten, N., 434, 439, 441  
 Rall, D. P., 434, 439, 441  
 Ralson, D. J., 208  
 Ralston, B. S., 301  
 Ramos, C. P., 14  
 Ramot, B., 140  
 Ramseier, H., 116  
 Ranadive, N. S., 116, 119, 122  
 Randle, P., 307, 310  
 Ranney, H. M., 161, 172, 173  
 Rao, S., 106  
 Raper, A. B., 171  
 Raper, H. S., 299  
 Rapp, H., 197  
 Rapp, W., 371  
 Rasmussen, A. F., Jr., 24  
 Rassin, D. K., 342  
 Rastrick, J. M., 381  
 Rathpurn, J. C., 343  
 Ratner, A., 347  
 Ratnoff, O. D., 105, 109, 139, 341  
 Ratch, O. T., 434  
 Ravel, J., 435  
 Ravnik, A., 224  
 Rawls, W. E., 27  
 Ray, C. G., 34  
 Ray, J. R., 369, 370  
 Rayner, P. H. W., 252  
 Razis, P. V., 124  
 Reaven, G., 235  
 Reber, H. A., 310

- Rebeck, J. W., 106, 107,  
 120, 124  
 Recant, L., 301, 311,  
 313  
 Rechcigl, M., Jr., 347  
 Rector, F. C., Jr., 87, 90,  
 92, 265, 266  
 Redel, A., 114  
 Redeker, A. G., 347  
 Reed, C. S., 159  
 Reed, W. G., 211  
 Reemsta, K., 102  
 Reeves, B. R., 392  
 Reeves, J. L., 85  
 Refsum, S., 339  
 Regan, T. J., 52  
 Regelson, W., 18, 20, 31,  
 32  
 Regoez, E., 135  
 Reich, M., 150  
 Reich, T., 368, 370  
 Reid, H. A., 71  
 Reid, R. T., 191  
 Reinertson, R. P., 65  
 Reinicke, V., 29, 30  
 Reisman, L. E., 381, 383,  
 389, 389  
 Reisman, R. E., 187  
 Reissmann, K. R., 159,  
 160  
 Relkhodja, O., 161  
 Relman, A. S., 14  
 Remington, J. S., 201-18;  
 18, 29, 30, 36, 37, 201,  
 202, 205, 206, 207, 208,  
 209, 210, 211, 212, 213,  
 214  
 Remold, H. G., 116  
 Rendall, J. W., 4, 9,  
 10  
 Rennert, O. M., 345  
 Renold, A. E., 312  
 Repault, J., 209  
 Retera, R. J. M., 138  
 Reutter, F., 209  
 Reynafarje, C., 149, 150  
 Reynolds, C. A., 161  
 Reynolds, E. S., 9,  
 209  
 Reynolds, T. B., 275  
 Rhim, J. S., 31, 52  
 Rhodes, J. M., 117  
 Ricci, N., 399  
 Richards, J. D. M., 167  
 Richardson, B. L., 230  
 Richardson, E. P., 210  
 Richardson, J. H., 63  
 Richart, R. M., 396,  
 398  
 Richenderfer, L., 243  
 Richmond, H. G., 399  
 Richter, R. B., 346  
 Rickers, H., 390  
 Riddle, J. M., 124, 357,  
 364  
 Riderknecht, H., 304  
 Ridge, O., 392  
 Ridot, M., 138  
 Rieder, R. F., 162, 163,  
 165, 173  
 Riehl, G., 358  
 Rigaud, A., 204  
 Riggs, A., 159, 160,  
 172  
 Riggs, L., 224, 243, 252  
 Righthand, F., 293  
 Rights, F. L., 27  
 Rigo, S. J., 383  
 Riley, F., 28, 214  
 Riley, J. F., 105, 113,  
 114  
 Riley, V., 19, 437  
 Rimoin, D. L., 231  
 Risley, E. A., 106  
 Rita, G., 18, 20, 25, 30,  
 35  
 Ritzmann, S. E., 383, 392,  
 399, 400  
 Riva, G., 399, 400  
 Rivera, E. P., 63  
 Rivers, S. L., 345  
 Rizzo, A. P., 117  
 Robb, C. A., 272, 273  
 Robbins, J., 138  
 Robbins, J. B., 292  
 Roberts, F. E., 111,  
 112  
 Roberts, G. E., 340  
 Roberts, J., 434, 437, 439,  
 440, 441  
 Roberts, P. D., 140  
 Robertson, A., 203  
 Robertson, J. I. S., 81, 82,  
 83, 84, 91, 139  
 Robins, E., 367  
 Robinson, T. W. E., 25,  
 28  
 Robinson, W., 211  
 Robson, H. N., 380, 389,  
 392  
 Rocha e Silva, M., 72  
 Roche, M., 152  
 Rochner, A., 224  
 Rocklin, R. E., 4  
 Roddam, R. F., 243, 244,  
 245, 250, 253  
 Rodey, G. E., 123, 124  
 Rodger, M., 272  
 Rodmann, T., 171  
 Rodman, G. P., 360  
 Rodriguez-Erdmann, F.,  
 136, 141  
 Rodriguez Fernandez, J.,  
 138  
 Rogers, D. E., 125  
 Rogers, D. W., 70  
 Rogers, L. E., 345, 346  
 Rogers, R. W., 70  
 Roget, J., 138  
 Rojas, L., 225, 301, 308,  
 310  
 Rokutanda, H. K., 34  
 Ropes, M. W., 360  
 Rosa, J., 161, 163, 173  
 Rosati, R. A., 51  
 Rose, B., 195  
 Rose, F. C., 313  
 Rose, G. A., 14  
 Rose, H. M., 289, 290  
 Roseman, S., 330  
 Rosemeyer, M. A., 165,  
 169  
 Rosen, D., 380, 386,  
 390  
 Rosen, F. S., 11, 12  
 Rosen, R. B., 385  
 Rosen, S. M., 271  
 Rosenau, W., 117  
 Rosenbaum, E., 124  
 Rosenbaum, E. H., 395  
 Rosenberg, A., 319  
 Rosenberg, C. A., 381  
 Rosenberg, L. E., 8, 335,  
 346, 347  
 Rosenberg, L. T., 12  
 Rosenbloom, F. M., 348  
 Rosenfeld, C., 437  
 Rosenfeld, G., 72  
 Rosenthal, D. S., 394  
 Rosenthal, S. H., 369  
 Rosenthal, S. R., 67, 69  
 Rosner, F., 385  
 Ross, E. J., 77  
 Ross, J., 154  
 Ross, J., Jr., 273, 274,  
 275  
 Ross, J. D., 395  
 Ross, J. H., 139  
 Rosselin, G., 229, 252, 253,  
 307  
 Rossen, R. D., 283, 284,  
 289, 290, 293  
 Rossi-Bernardi, L., 170  
 Rossi-Fanelli, A., 159,  
 173  
 Rossiter, R. J., 332  
 Rossmann, T. G., 22  
 Roswell, H. C., 122  
 Rotem, Z., 17, 34  
 Roth, H., 337  
 Roth, J., 219, 243, 245, 251,  
 262  
 Roth, M., 367  
 Roth, W., 209  
 Rothenbuchner, G., 379,  
 399  
 Rother, K., 119  
 Rother, U., 119  
 Rothermich, N. O., 105  
 Rothmann, S. S., 310  
 Rothschild, M. A., 276  
 Rotstein, J., 105  
 Roughton, F. J. W., 160,  
 170  
 Rouiller, C., 312  
 Rouse, M. B., 340  
 Roussel, J. L., 204  
 Rowe, D. W., 229, 242  
 Rowe, W. P., 31, 32  
 Rowland, M., 51  
 Rowley, B., 434

- Rowley, D. A., 111, 112  
 Rowley, J. D., 390, 394  
 Royol, J., 202  
 Rubenberg, M. L., 135, 136,  
 137, 139, 140, 141  
 Rubenstein, A. H., 219, 245,  
 303  
 Rubin, A. D., 141  
 Rubin, C. E., 291, 328  
 Rubin, E. C., 273  
 Rubin, W., 289  
 Ruckerbauer, G. M., 203  
 Rucknagel, D. L., 159,  
 161  
 Ruddy, S., 11, 12, 13  
 Rudesco, K., 30  
 Rudick, J., 301  
 Rudkin, G. T., 380  
 Rudloff, D. A. C., 24  
 Ruffie, J., 163, 173,  
 392  
 Rule, A., 101  
 Rull, J. A., 224  
 Rulon, D. B., 3, 10  
 Rune, S. J., 305  
 Rush, B., 151  
 Ruskin, J., 37, 207, 208,  
 210  
 Russell, A., 343  
 Russell, E., 211  
 Russi, M., 35  
 Russi-Sorce, M., 35  
 Ruth, W. E., 159, 160  
 Ruthven, I. S., 138  
 Rutty, A., 137, 138  
 Ruvalcaba, R. H., 232  
 Ryan, G. B., 115, 120,  
 121  
 Rybo, G., 152  
 Rymo, L., 284, 285  
 Rytel, M. W., 24, 28,  
 212
- S
- Sabin, A. B., 180, 183,  
 207  
 Sabo, E. F., 300  
 Sacker, L. S., 141  
 Sackler, M., 154  
 Sagel, I., 7  
 St. Arneault, G., 436,  
 440  
 Salamat, L., 150  
 Salans, L. B., 229, 241,  
 246  
 Salasoo, I., 113  
 Salb, J. M., 33  
 Salles-Mourlan, A. M., 392  
 Salmon, J. H., 396,  
 397  
 Salmon, S., 197  
 Salser, J. S., 434, 435, 436,  
 440  
 Saltman, P., 146  
 Saltzman, H. A., 172  
 Samaan, N., 245  
 Samols, E., 224, 225, 232,  
 233, 234, 245, 301, 304,  
 308, 309  
 Samter, M., 105  
 Sanbar, S., 234  
 Sandberg, A. A., 379-408;  
 379, 380, 381, 383, 385,  
 388, 389, 390, 391, 392,  
 394, 396, 397, 398, 399  
 Sanders, A. G., 109  
 Sanderson, P. H., 91,  
 95  
 Sandhoff, K., 330, 331  
 Sandritter, W., 398  
 Sandson, J., 10  
 Sanson, B. F., 435  
 Sansone, G., 162  
 Santo, G., 348  
 Santos, R. F., 264  
 Sanyal, R. K., 111, 112  
 Sapp, T. M., 117  
 Saraiva, L. G., 390  
 Sarkar, B., 146  
 Sarma, P. S., 25, 31, 32,  
 36  
 Sarner, M., 232  
 Sarnoff, L. C., 83  
 Sarnoff, S. J., 83  
 Sarswathi, S., 323  
 Sasaki, M. S., 396, 397,  
 398, 399  
 Satge, P., 395  
 Sato, H., 364  
 Sato, T., 347  
 Saudin, E. H., 192  
 Sawitski, A., 395  
 Saxén, L., 23  
 Sbarra, A. J., 124  
 Scarborough, H., 91,  
 95  
 Scarpelli, D. G., 232  
 Schaal, S. F., 51, 54  
 Schachter, D., 149, 149  
 Schachter, M., 71  
 Schade, S. G., 146  
 Schade, S. L., 230  
 Schaefer, J., 206  
 Schaefer, S., 122  
 Schaepdyver, A. F., 348  
 Schafer, M. E., 256  
 Schaki, R., 380  
 Schalch, D., 347  
 Schalch, D. S., 224, 226,  
 227, 231  
 Scharfman, W. B., 141  
 Scheer, R. L., 159  
 Scheig, R., 439  
 Schein, P. S., 434, 439,  
 441  
 Schenker, S., 19  
 Scherer, J., 122  
 Scherlag, B. J., 49, 52  
 Scheuer, P. J., 155  
 Schieffer, K., 35  
 Schieffner, A., 35  
 Schiffer, L. M., 149  
 Schildkraut, J. J., 387,  
 372, 375  
 Schilling, E., 252  
 Schimke, R. N., 341,  
 342  
 Schlant, R. C., 55  
 Schlesinger, M., 438  
 Schleupner, C. J., 34  
 Schlumberger, J. R., 437  
 Schmale, J., 285, 286,  
 290  
 Schmid, W., 379, 394  
 Schmidt, D. H., 52  
 Schmidt, J. P., 30  
 Schmidt, M. L., 388, 389,  
 397  
 Schneider, A. J., 349  
 Schneider, E. G., 272,  
 273  
 Schneider, G., 383, 394  
 Schneider, M., 437  
 Schneider, R. G., 161,  
 162  
 Schnermann, J., 80  
 Schober, B., 379, 399  
 Schoell, G. I., 111  
 Schoenbeckler, M. J., 192  
 Schöffing, K., 384, 399  
 Schonne, E., 18, 20, 25, 26,  
 29, 30, 35  
 Schonne, H., 290  
 Schopman, W., 252  
 Schou, J., 110  
 Schou, M., 372  
 Schraeder, J., 109  
 Schramek, S., 18  
 Schreiber, S. S., 276  
 Schrek, R., 435  
 Schretlen, E., 137  
 Schroeder, E., 390  
 Schroeder, T. M., 394  
 Schroeder, W. A., 157,  
 168  
 Schteingart, D. E., 252  
 Schubert, W. K., 324  
 Schubova, V., 211  
 Schulte, W. J., 225  
 Schultz, E. J., 59  
 Schultz, R. B., 243, 252  
 Schultz, W. W., 18, 29,  
 30  
 Schuman, L. M., 211  
 Schur, P. H., 7, 10  
 Schwartz, F., 3, 252  
 Schwartz, G. H., 54  
 Schwartz, H. G., 140  
 Schwartz, J. H., 435,  
 436  
 Schwartz, L. L., 121  
 Schwartz, M. K., 434, 435,  
 436, 437, 438, 439, 441  
 Schwartz, R., 337, 338,  
 345  
 Schwartz, R. S., 9, 14,  
 210  
 Schwartz, W. B., 14, 259,  
 260, 262, 265  
 Schwarz, V., 342

- Schwarzenberg, L., 437  
 Schweld, D., 372  
 Scoggins, R. B., 345  
 Scott, J. T., 363  
 Scott, P. J., 55  
 Scow, R. O., 307  
 Scratcherd, T., 306  
 Scribner, B. H., 230  
 Scrivner, C. R., 335  
 Scroggins, B. A., 79  
 Seakins, J. W. T., 344  
 Sealy, W. C., 54, 272  
 Seaman, E., 206  
 Sears, D. A., 141  
 Seegal, B. C., 4, 7, 9, 10  
 Seegers, W., 122  
 Seegmiller, J. E., 70, 106, 348, 358, 359, 361, 362  
 Seeman, M. J., 141  
 Seftel, H., 151, 153  
 Seftel, H. C., 139  
 Segal, S., 337  
 Segar, W. E., 8  
 Seif, G. S. F., 399  
 Seita, M., 161  
 Settelberger, F., 318  
 Selawry, O. S., 437, 438, 439, 440, 441  
 Seldin, D. W., 87, 90, 92, 265, 266  
 Seligmann, M., 287  
 Seligsohn, N., 140  
 Selkurt, E. E., 75  
 Sellin, H., 434  
 Sellman, J. C., 92, 230, 265, 266  
 Selner, J. C., 289  
 Seltzer, S., 234  
 Selvaraj, R. J., 124  
 Selye, H., 114  
 Selzer, A., 47-58; 47, 49, 50, 56  
 Semar, M., 7  
 Senior, B., 344, 345  
 Senterfitt, L. B., 5, 138  
 Serpick, A. A., 437, 438, 439, 440, 441  
 Seto, D. S. Y., 22  
 Sevvit, L. H., 139  
 Sevvit, S., 106, 108  
 Seyffert, W. A., Jr., 224, 307  
 Shahid, M. J., 155  
 Shakmamoto, S., 140  
 Shaldon, S., 275  
 Shankle, S. W., 232  
 Shapiro, D., 319, 320, 324, 326  
 Shapiro, W., 52, 275  
 Share, L., 86, 261, 262  
 Sharp, J. A., 117  
 Sharpstone, P., 138  
 Shaw, D. M., 374, 375  
 Shaw, M. W., 409-32  
 Shaw, W. N., 245  
 Sheaff, E. T., 34  
 Shear, L., 229  
 Sheehan, J. T., 300  
 Sheffield, H. G., 202, 213  
 Shegel, S. M., 109  
 Shehadeh, I. H., 12, 13  
 Sheldon, W. H., 106  
 Shelley, W. B., 67, 68  
 Shelton, E., 117  
 Shelton, J., 373  
 Shepard, M. C., 184  
 Sheppard, R. C., 300  
 Sheridan, B., 227, 310  
 Sherlock, S., 69, 155, 275  
 Sherwin, R. M., 140  
 Sherville, E., 275  
 Shibata, S., 159, 166, 167, 172  
 Shibita, A., 140  
 Shields, W. F., 437  
 Shih, T. Y., 70  
 Shih, V. E., 343, 344  
 Shilkin, K. B., 106, 119  
 Shillingford, J. P., 48, 49  
 Shima, K., 228  
 Shimizu, A., 159  
 Shimizu, K., 170  
 Shimonaski, G., 18, 20  
 Shimoshige, M., 223  
 Shin, H. S., 115, 118  
 Shin, M. H., 8  
 Shinton, N. K., 162  
 Shiotiri, K., 203  
 Shirley, W., 124  
 Shiu, G., 31, 32, 36  
 Shive, W., 435, 439  
 Shlierf, G., 224  
 Shooter, E. M., 157, 160, 166, 168  
 Shope, R. E., 18, 19  
 Shore, V. C., 169  
 Shubich, M. G., 109  
 Shultz, K. T., 227  
 Shuster, S., 112  
 Shwachman, H., 99, 100, 101, 102  
 Sicuteri, F., 69  
 Sidbury, J. B., Jr., 345, 346  
 Sidransky, H., 210  
 Stetner, H., 380, 386, 394, 399, 400  
 Siegesmund, K. A., 183  
 Sigel, M. M., 24, 34  
 Stigler, A. T., 395  
 Süki, D., 18  
 Silber, E. N., 272  
 Silberman, S., 390  
 Silverman, C., 367  
 Silverstein, A. M., 292  
 Silvestroni, E., 161  
 Simberloff, M., 184  
 Simkin, B., 252  
 Simkin, P., 350  
 Simms, E. A., 229  
 Simon, E., 223  
 Simone, J., 438  
 Simpkins, M. J., 440  
 Simpson, K., 338  
 Simpson, R. G., 233, 243  
 Simpson, S. A., 76, 78  
 Simpson, S. L., 252  
 Simpson, W. J., 231  
 Sims, E. A. H., 242  
 Sinclair, R., 86, 261, 262  
 Singer, B., 79  
 Singer, D. H., 48, 49, 51, 52  
 Singer, H., 379, 397  
 Sinks, L., 434, 436, 440  
 Sinks, L. F., 399  
 Sipos, K., 63  
 Sisson, S., 9  
 Skehel, J. J., 17, 22, 23  
 Skillman, T. G., 225  
 Skinner, S. L., 84, 93  
 Sklaroff, H. J., 52  
 Skovsted, L., 52  
 Slater, E., 367  
 Sleisenger, M. H., 289  
 Sliim, J. Chr., 201, 204  
 Sloan, H. R., 326  
 Slobody, L. B., 10  
 Sloman, G., 48, 56  
 Slot, E., 397  
 Smadel, S. E., 18  
 Small, C., 336  
 Small, P. A., 287, 289, 292, 293  
 Smalley, R. V., 380, 383, 390  
 Smeby, R. R., 346  
 Smith, C. B., 288, 293  
 Smith, C. H., 155  
 Smith, D. E., 105, 113  
 Smith, H. W., 75, 76  
 Smith, J. R., 159  
 Smith, L. H., Jr., 345  
 Smith, L. L., 173  
 Smith, M., 163  
 Smith, M. D., 154  
 Smith, M. G., 212  
 Smith, M. J. H., 105  
 Smith, P. K., 105  
 Smith, P. M., 146  
 Smith, R., 69  
 Smith, R. T., 109  
 Smith, T. J., 17, 18, 20, 26  
 Snodgrass, G. J., 338  
 Snoeck, J., 349, 350  
 Snow, P. J. D., 55  
 Snyderman, R., 115, 118  
 Soave, O. A., 29  
 Sobin, L. H., 434, 435  
 Sodi-Pallares, D., 55

- Soeldner, J. S., 222, 229, 233, 254, 256  
 Soffritti, E., 161  
 Sofuni, T., 388, 389, 391, 399  
 Sohal, R. S., 8  
 Sokal, J. E., 309, 381, 385  
 Sokoloff, L., 360  
 Solari, A. J., 392  
 Solcia, E., 312  
 Solomon, A., 284, 286, 288, 289, 290, 292  
 Solomon, G. F., 24  
 Solomon, S. S., 220, 245  
 Somerson, N. L., 184  
 Sommers, S. C., 101  
 Sonnabend, J. A., 33  
 Sonnenberg, H., 89  
 Sonnenblick, E. M., 274  
 Sonnenschein, R. R., 67  
 Soothill, J. F., 12, 13, 124  
 Sorcini, M., 159  
 Sorensen, A., 368  
 Soriano, J. R., 344  
 Sorkin, E., 115, 116, 117, 118, 119  
 Sourander, P., 211  
 South, M. A., 287, 288, 289  
 Southam, C. M., 124  
 Southcott, R. V., 72  
 Southworth, J. L., 270  
 Sowton, E., 54  
 Spaeth, G. L., 341, 342  
 Spann, J. F., Jr., 48, 274  
 Sparkes, R. S., 394  
 Sparrow, E. M., 112  
 Spaur, W., 347  
 Spector, R., 340  
 Spector, W. G., 105, 106, 107, 108, 109, 111, 112, 113, 115, 116, 119, 120, 121, 122  
 Speed, D. E., 381, 382, 384  
 Speer, R. J., 439  
 Spellacy, W. N., 230  
 Spellman, M., 367, 369  
 Spencer, H. H., 161  
 Spencer, M. P., 75  
 Spengler, G. A., 399, 400  
 Spergal, G., 227  
 Sperry, B. P., 339, 340  
 Spiers, A. S. D., 399  
 Spiger, M. J., 230  
 Spitzer, A., 90  
 Spitzer, R. E., 12  
 Spitznagel, J. K., 122  
 Spivack, A. P., 51  
 Spivack, M., 319  
 Spock, A., 103, 104  
 Spooner, C. E., 375  
 Spriggs, A. I., 396, 398, 399  
 Spriggs, T. L. B., 311  
 Spring, G. K., 372  
 Sproul, A., 103  
 Sprouse, J. H., 50  
 Srinivasan, P. R., 435  
 Staefien, J., 399  
 Stafford, J. L., 380, 381, 384, 392, 393  
 Stahl, A., 379, 390  
 Stahl, W., 210  
 Stamakoyannopoulos, G., 158, 159, 163, 167, 173  
 Stamler, J., 272  
 Stanbury, J. B., 335, 344  
 Stancak, D., 34  
 Stanfield, A. B., 105  
 Stanley, M. A., 398  
 Stannard, M., 56, 383  
 Stanworth, D. R., 198, 284, 286, 287  
 Starling, E. H., 299  
 Starr, T. J., 24, 25, 28  
 Starzl, T. E., 4, 9, 10, 345  
 Staunton, H. P., 49  
 Stavropoulos, K., 181  
 Steadman, J. H., 162, 165, 166  
 Stecher, V. J., 119  
 Stechschulte, D. J., 122  
 Steele, A. D., 106, 357, 359, 361  
 Steele, R. H., 107, 108  
 Steenholt, G., 434  
 Stein, I. F., Jr., 304  
 Stein, M. F., 243, 251  
 Stein, N., 146  
 Steinberg, A. D., 37  
 Steinberg, A. G., 283, 284  
 Steinberg, D., 301, 338, 339  
 Steinberg, J., 372  
 Steinberg, T., 223  
 Steinberger, A., 27  
 Steinbrunn, W., 51  
 Steiner, D. F., 219, 245, 303  
 Steingold, L., 166  
 Stening, G. F., 301, 302  
 Stephens, C. A. L., Jr., 105  
 Stephenson, J. B. P., 340, 341  
 Stern, G., 155  
 Stern, P., 111, 112, 113  
 Sternbach, H., 20  
 Sternberg, W. H., 394  
 Stetson, C. A. Jr., 138  
 Stevens, A. R., Jr., 153  
 Stevens, J. E., 105, 121  
 Stevens, K., 159  
 Stewart, G. A., 228  
 Stewart, J. W., 69  
 Stewart, R. B., 34  
 Stewart, S. E., 399  
 Stich, H. F., 379  
 Stich, W., 384  
 Stickler, G. B., 8, 138, 350  
 Stiehm, E. R., 206, 284  
 Still, J., 172  
 Stimmer, L., 307  
 Stinebrink, W. R., 17, 18, 20, 21, 22, 25, 26, 28, 37  
 Stirling, B. D., 30  
 Stirling, C. E., 349  
 Stitt, C. F., 146  
 Stitzel, A., 12  
 Stobo, J., 284  
 Stock, C. C., 438  
 Stock, E., 48  
 Stockert, E., 435, 436, 437, 440  
 Stoerk, H. C., 79  
 Stoffel, W., 241  
 Stokke, O., 339  
 Stoll, H. L., 59, 61  
 Stollerman, G. H., 7  
 Stolte, H., 77  
 Stone, O. J., 107, 113  
 Stone, O. M., 18, 19  
 Storrs, R. C., 394  
 Stoughton, R. B., 105  
 Strand, L., 161  
 Strandberg, B. E., 169  
 Strander, H., 23, 37  
 Strannegård, O., 207, 211  
 Stratford, E. C., 140  
 Straumfjord, J. V., 206  
 Straus, W., 121  
 Strauss, A. F., 133  
 Streeck, E., 203  
 Streiff, F., 384  
 Strober, W., 289  
 Strömberg, E., 368  
 Strong, J. A., 252  
 Struck, E., 380, 386, 390  
 Studley, F., 146  
 Sturman, J. A., 342  
 Subak-Sharpe, H., 322  
 Subrahmanyam, T. P., 24, 35  
 Sudora, E., 12  
 Sueltenfuss, E. A., 29, 30  
 Sugimori, H., 396  
 Sukkar, M. Y., 226  
 Sullivan, A. L., 288, 292  
 Sullivan, M., 62, 394  
 Sulzer, A. J., 204, 205  
 Sum, P. T., 309  
 Summers, W. P., 438  
 Summerskill, W. H. J., 275, 313  
 Sun, S. C., 8  
 Sung, C. Y., 51



- Sunnon, J. B., 252  
 Sunshine, P., 205, 206  
 Surawicz, B., 55  
 Sussman, K. E., 229  
 Suter, E., 208  
 Sutherland, B. S., 339, 340  
 Sutherland, D. A., 138  
 Sutherland, E. W., 308  
 Suzuki, A., 140  
 Suzuki, C., 140  
 Suzuki, K., 203  
 Suzuki, T., 159  
 Suzuki, Y., 8  
 Svanes, K., 108  
 Svennerholm, L., 330  
 Svenson, B., 161, 166  
 Sverdlid, A. B., 392  
 Sret-Moldavsky, G. J., 28  
 Swaitman, K. F., 339, 340  
 Swanson, M. A., 14, 210  
 Sweeley, C. C., 324, 327, 328  
 Swenson, R. T., 173  
 Swift, M. R., 394  
 Swisher, S. N., 380, 381  
 Switzer, W. P., 181  
 Syllim-Rappoport, I., 394, 395  
 Symmers, W. St. C., 133  
 Szabados, J., 30  
 Szegedi, Gy., 23  
 Szeinberg, A., 340  
 Szporny, L., 110
- T
- Tada, K., 344, 347, 349  
 Tada, T., 193, 284  
 Taichman, N. S., 122  
 Tait, J. F., 76, 78, 274  
 Tait, S. A. S., 274  
 Taitz, L. S., 344  
 Takagi, M., 349  
 Takagi, N., 388, 389, 390, 391, 396, 397, 398  
 Takahashi, R., 375  
 Takamizawa, M., 375  
 Takebayashi, I., 204, 205  
 Takeda, I., 159, 166, 167  
 Takeda, T., 83  
 Takenaka, M., 172  
 Takeuchi, H., 204, 205  
 Takumi, K., 204, 205  
 Talal, N., 37  
 Talamo, R. C., 100, 101  
 Talice, R. U., 202  
 Tallal, L., 434, 435, 437, 439, 440, 441  
 Tamir, I., 225  
 Tamura, A., 159  
 Tan, C., 437, 438, 439, 440  
 Tan, E. M., 284, 286, 288, 289, 290, 292  
 Tanaka, K., 344  
 Tanaka, K. R., 140  
 Tanaka, Y., 384, 386  
 Tanese, T., 301  
 Tangun, Y., 141  
 Tanner, R., 380, 381, 384, 392, 393  
 Tappel, A. L., 317  
 Tarnowski, G. S., 438  
 Tasaki, I., 113  
 Tassoni, E. M., 390, 399  
 Taube, S. E., 18, 21, 22  
 Tauber, S., 304  
 Taubman, M. A., 294  
 Tauro, G., 437, 438  
 Tauscher, L., 201  
 Tauxe, W. N., 275, 363  
 Tavares, A. S., 398  
 Tawakkol, A. A., 54  
 Taylor, E. W., 363  
 Taylor, F. B., Jr., 119  
 Taylor, J. J., 384  
 Taylor, K. W., 233, 307  
 Taylor, P. E., 19  
 Taylor, R. R., 273, 275  
 Taylor, S. H., 49  
 Taylor, W., 348  
 Taylor-Robinson, D., 184  
 Taysi, K., 103  
 Tchoubrousky, G., 229, 252, 253  
 Tedesco, T. A., 337, 344  
 Temesio, N., 138  
 Temte, J. V., 51, 52  
 Tentori, L., 159  
 Teplitz, M. R., 385  
 Teplitz, R. L., 385  
 Ternynck, T., 189  
 Terry, W. D., 190, 192, 198  
 Testelli, M. R., 55  
 Testolin, R., 394  
 Teubner, H., 100  
 Thaler, M. M., 390  
 Thannhauser, S. J., 319  
 Theodoridis, C. G., 252  
 Theologides, A., 201, 209  
 Thiel, G. B., 3, 10  
 Thiffault, C. A., 224, 250, 307  
 Thind, I. S., 28  
 Thomas, G. L., 230  
 Thomas, J. E., 311  
 Thomas, J. P., 274, 276  
 Thomas, L., 179-86; 4, 105, 109, 181, 182, 183, 184, 185, 210  
 Thomas, M., 48, 49  
 Thomas, M. T., 30, 31, 32, 36  
 Thompson, E. N., 124  
 Thompson, P. L., 111, 119, 120  
 Thompson, R. B., 172  
 Thompson, R. L., 380, 386, 388, 389, 390  
 Thomson, P., 51  
 Thorbecke, G. J., 289  
 Thorbecke, J., 184  
 Thorn, G. W., 48, 76  
 Thurnau, K., 77, 80, 81, 84, 91, 271  
 Tiddens, H. A. W. M., 137, 252  
 Till, M., 381  
 Tilles, J. G., 34  
 Tillotson, R. F., 49  
 Timmermans, J., 349, 350  
 Tina, L. U., 11  
 Tinland, R., 35  
 Tipton, R. E., 382  
 Tlachler, B., 341, 342  
 Tizard, J., 339, 340  
 Tjabbes, T., 256  
 Tjio, J. H., 380, 381, 383, 384, 385, 386, 387, 388, 390, 391, 399  
 Tobian, L., 84  
 Todaro, G. J., 32  
 Todd, A. S., 109  
 Toews, H. A., 396, 397  
 Tokarev, O. Y., 109  
 Tokuhata, G. K., 381  
 Tokumaru, T., 24, 34  
 Tomao, F. A., 436  
 Tomaschek, G., 202  
 Tomasi, T. B., Jr., 281-98; 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295  
 Tomkins, R. K., 313  
 Tomlin, P. J., 227  
 Tommilia, V., 29  
 Tomonaga, M., 380, 383, 384, 385, 389, 391  
 Tonomura, A., 398  
 Toone, E., 361  
 Topolaka, P., 394  
 Torrance, J. D., 147, 149, 150, 153  
 Toru, M., 375  
 Toishioka, N., 204, 205  
 Tóth, F. D., 23  
 Tough, I. M., 380, 381, 382, 383, 384, 385, 389, 390, 391, 394, 399  
 Tourville, D. R., 282, 283, 288, 289, 290, 291, 292, 293  
 Toussaint, C., 209, 277  
 Townes, P. L., 344  
 Townley, R. R. W., 336  
 Toy, S. T., 23  
 Tracy, H. J., 300, 313  
 Traenkle, H. L., 59, 61, 63  
 Tragerman, L. J., 319

Trams, E. G., 319  
 Traub, W. H., 31  
 Traynor, I., 245  
 Treser, G., 7, 8  
 Tristani, F. E., 275, 276  
 Troelstra, J. A., 138  
 Trown, P. W., 37  
 Troyer, W. G., Jr., 49  
 Trudeau, W. L., 303, 313  
 Truden, J. L., 34  
 Trujillo, J. M., 381, 383  
 Try, K., 338, 339  
 Tschudy, D. P., 347  
 Tsirimbis, A., 384  
 Tsitouris, G., 109  
 Tsuchiya, K., 375  
 Tsuji, Y., 434  
 Tsaluka, V., 109  
 Tsunematsu, Y., 203  
 Tsunoda, K., 203  
 Tudhope, G. R., 139  
 Tully, J. G., 183  
 Turk, J. L., 105  
 Turnberg, L. A., 146  
 Turnbull, A., 139, 147, 153  
 Turner, D. S., 301, 311  
 Turner, W., 31, 32  
 Turpin, R., 379, 395  
 Turtle, J. R., 227  
 Tuttle, E. P., Jr., 274  
 Ty, A., 7  
 Tyler, F. H., 230  
 Tyler, J., 225, 301, 304, 308  
 Tyler, J. M., 18, 19  
 Tyler, R. W., 105  
 Tyrrell, S. A., 19, 29, 30  
 Tytell, A. A., 18, 19, 20, 21, 22, 26, 28, 36, 214  
 Tyuma, I., 159, 160

## U

Udem, L., 161  
 Ueda, H., 83  
 Ueda, S., 161, 162, 166, 167  
 Uhlendorf, B. W., 320, 321, 324, 325, 326, 331, 338, 339, 341, 342, 348  
 Uhlendorf, C., 25  
 Uhr, J. W., 105, 106  
 Ujihara, M., 25  
 Ukal, M., 262  
 Ulstrom, R. A., 350  
 Ultmann, J. E., 209  
 Umbarger, B., 339, 340  
 Unanue, E. R., 1, 2, 4, 119  
 Unger, A. H., 52  
 Unger, R. H., 224, 225, 226, 299, 301, 304, 307, 308, 309, 310, 313, 440  
 Uriuhara, T., 122, 124  
 Urizar, R. E., 9  
 Urquhart, J., 269, 270, 273  
 Urtazum, J., 138  
 Utiger, R. D., 262, 264  
 Uva, F., 301  
 Uvnas, B., 312  
 Uy, E. S., 390

## V

Vaerman, J. P., 187, 282, 282  
 Vagne, M., 301, 302  
 Vahlquist, B., 192  
 Vajda, J., 113  
 Valberg, L. S., 395  
 Valdes, A. J., 5  
 Valentine, M. D., 122  
 Valentine, P. A., 48  
 Vallota, E. H., 12  
 Valori, C., 49  
 Valsamis, M. P., 209, 210  
 Valtin, H., 259, 266  
 Valverde, I., 225, 308  
 VanCaneghem, A., 276  
 Vance, J. E., 227, 311  
 van de Kamer, J. H., 345  
 Vandenbroucke, J., 91, 95  
 Vandeputte, M., 31, 32  
 Vander, A. J., 80, 81, 93  
 Vanderberg, J., 29, 30, 213  
 Van der Voen, J., 204  
 Vane, J. R., 70, 85  
 Van Frank, R. M., 18, 19  
 Van Gerrbruyden, J., 209  
 Van Giesen, G., 87  
 Van Harreveld, A., 374  
 van Herick, W., 179, 180  
 Van Hoof, F., 317, 329  
 Vanini, G. C., 204  
 Van Itallie, T. B., 225  
 van Nevel, C., 348  
 Vannier, W. E., 187, 283, 284  
 Van Noorden, D. M. J., 204  
 Van Nunen, M. C. J., 204  
 Vanotti, A., 311  
 Van Peenan, H. J., 222  
 Van Riet, H. G., 252  
 van Rooyen, C. E., 23  
 Van Rossum, W., 24  
 Van Scott, E. J., 65  
 Vanslyke, D. D., 276, 277  
 Van Steenis, H., 379, 397  
 van't Hoff, W., 77  
 van Winkle, W., Jr., 105  
 Varacalli, F., 22  
 Varela, M. A., 394  
 Vasilescu, T., 30  
 Vasina, S. G., 202  
 Vassalli, P., 4, 10, 11, 119, 140  
 Vassalo, G., 312  
 Vassaux, C., 50, 51  
 Vassella, F., 343, 344  
 Vaughan, J. H., 292  
 Vaughan, M., 301  
 Vaughan-Williams, E. M., 52  
 Vawter, G. F., 11  
 Vazquez, J. J., 4, 5  
 Veiga, A. A., 388, 389, 399  
 Vela, P., 230  
 Velasquez, F., 9  
 Venditti, J., 438  
 Venginsaya, E. A., 109  
 Venkatachalam, M. A., 136, 137  
 Ventom, M. G., 89, 92  
 Vereerstraeten, P., 277  
 Verel, D., 139  
 Veress, A. T., 39  
 Verma, M. P., 202  
 Vermeer, W. L., 69  
 Verney, E., 210  
 Vernier, R. L., 3, 4, 9, 10, 14  
 Verniroy, A., 82, 83  
 Vernon-Roberts, B., 105  
 Veron, A. J., 434  
 Vialalatte, J., 395  
 Videbaek, A., 384  
 Vietzke, W. M., 209, 210  
 Vilček, J., 18, 19, 20, 21, 22, 25, 29, 30, 33, 34, 213  
 Vinik, A. I., 232  
 Vinnick, L., 220  
 Viola, E. R., 392  
 Viola, M., 437, 438  
 Visakorpi, J. K., 343  
 Visca, U., 209  
 Vischer, W. A., 208  
 Visser, A., 138  
 Vitaccio, M., 137, 138  
 Vitaldi, G., 159  
 Vogel, C. L., 205, 210  
 Volk, B. W., 330, 331  
 Volkman, A., 107, 120  
 Volter, A., 204  
 Von Der Groeben, J. O., 51  
 von Kaulla, K. N., 13  
 von Korff, R. W., 109  
 Von Saltzer, M., 300  
 Vorherr, H., 262, 263, 264  
 Voroshilova, M. K., 19  
 Vosburgh, G. J., 139  
 Voss, H., 203  
 Voyles, N. R., 301

## W

- Wada, Y., 344, 349  
 Waddell, D. J., 19, 28, 34, 35  
 Waddell, R. W., 224, 225, 226, 308, 309, 310  
 Wade, H., 434, 441  
 Waelbroeck, C., 209  
 Wagner, H. N., Jr., 270  
 Wagner, J., 434  
 Wagner, R. R., 17, 18, 20, 22, 26  
 Wahl, N., 114  
 Wahren, J., 249, 250, 254, 256  
 Waisman, H. A., 340  
 Wajcman, H., 163, 173  
 Wakonig-Vaartaja, R., 396, 398  
 Wald, N., 380, 386, 390  
 Walden, B., 155  
 Waldenstrom, J., 349  
 Waldebsbühl, M., 286, 287  
 Waldman, T., 192  
 Waldmann, R., 293  
 Waldmann, T. A., 284, 289  
 Waldo, A. L., 49  
 Wales, J. K., 234  
 Walker, A. R. P., 153  
 Walker, F. A., 337  
 Walker, R. B., 147, 152  
 Walker, R. I., 122  
 Walker, S., 28, 390  
 Wallace, A. G., 49, 51, 54  
 Wallace, S. L., 362  
 Walls, B. E., 184  
 Walls, K. W., 209  
 Walters, M. N., 106, 111, 119, 120  
 Walters, S., 22  
 Walton, B. C., 204  
 Wang, C. C., 299, 309  
 Wang, H., 273  
 Wang, S. K., 70  
 Ward, L. E., 363  
 Ward, P. A., 8, 11, 12, 105, 115, 116, 117, 118, 119, 122  
 Ward, W. E., 319  
 Warin, R. P., 67  
 Warner, J., 124  
 Warner, R., 340  
 Warner, S., 394  
 Warrington, R. L., 172  
 Warshaw, A. L., 327  
 Warwick, W. J., 288, 289  
 Waschke, K., 27  
 Wasi, S., 122  
 Wasserman, L. R., 154  
 Watanabe, Y., 48, 49  
 Waters, P., 161, 167  
 Watrous, R. M., 67  
 Watson, H. C., 165, 168  
 Watson, J. I., 6  
 Watson, W. A., 203  
 Watt, M. F., 6  
 Watten, R. H., 3, 10  
 Wattiaux, R., 121  
 Watts, C. A. H., 368  
 Waxman, A. D., 347  
 Waxman, S., 147  
 Weatherall, D. J., 157, 159, 173, 390  
 Weber, G., 160  
 Weber, H., 140  
 Webster, M. E., 71, 93, 109, 361  
 Webster, P. D., 310  
 Wechsler, H., 373  
 Wegienka, L. C., 223, 224, 225, 251, 252  
 Wegria, R., 49, 272, 273  
 Wehman, J., 155  
 Weidmann, S., 49  
 Weigle, W. O., 6  
 Weibacher, R. G., 342  
 Weinberger, M. M., 18  
 Weiner, I., 276  
 Weinreb, N. J., 317, 321  
 Weinstein, I. B., 147  
 Weinstein, M. B., 147  
 Weintraub, L. R., 147, 149, 150  
 Weir, D. G., 336  
 Weissberg, H., 225  
 Weissman, R., 139  
 Weiss, L., 166  
 Weisser, M., 339, 340, 352  
 Weissman, G., 71, 105, 106, 121, 210  
 Weizner, I., 192  
 Welch, A. D., 434  
 Welland, F. H., 347  
 Welsh, G. W., 245  
 Welt, L. G., 87, 103, 104  
 Wennberg, E., 166  
 Went, L. N., 163  
 Wenz, E., 339, 340, 352  
 Werner, G., 211  
 Werner, H., 203  
 Wertelecki, W., 339, 340  
 Wertlake, P. T., 209  
 Wertz, G., 19  
 Wesson, L. G., Jr., 139  
 West, C. D., 12  
 West, G. B., 113  
 Westall, R. G., 342, 343  
 Westervelt, F. B., 229  
 Wetterqvist, H., 111  
 Whalley, P. J., 259  
 Whang, J., 380, 381, 383, 384, 385, 386, 390, 392, 399  
 Whang-Peng, J., 380, 381, 383, 384, 387, 388, 390, 391  
 Wheatley, D., 373  
 Wheby, M. S., 148, 151  
 Wheeler, E. O., 48  
 Wheelock, E. F., 17, 18, 19, 23, 27, 31, 32, 35, 36  
 Whelan, H. A., 434  
 Whicelow, M. J., 229, 245, 246  
 Whitaker, A. N., 137  
 White, J. C., 166  
 White, J. G., 123, 124  
 White, J. J., 225, 301, 308, 310  
 White, L., 397  
 White, L. R., 124  
 White, S., 374  
 Whitecar, J. P., Jr., 437, 438, 439, 440, 441  
 Whitehouse, F. W., 120  
 Whybrow, P. C., 374  
 Whyte, H. M., 256  
 Widdowson, E. M., 145, 242  
 Wide, L., 192, 284  
 Widmaier, R., 380  
 Wiederholt, M., 76, 77, 80  
 Wiedermann, G., 121  
 Wiernick, P. H., 383, 390  
 Wiggers, C. J., 49  
 Wilbanks, G. D., 398  
 Wilbur, J. F., 227  
 Wilbur, J. R., 19, 34, 35  
 Wilding, P., 304  
 Wilhem, D. L., 105, 106, 107, 108, 110, 112, 119  
 Wilkinson, R. H., 387  
 Williams, C., 344  
 Williams, D. L., 381  
 Williams, H. S., 155, 275  
 Williams, J. A., 380  
 Williams, J. C., 319  
 Williams, N. J., 300  
 Williams, R., 141, 146, 147, 155  
 Williams, R. F., 222  
 Williams, R. H., 219, 220, 224, 225, 226, 227, 233, 234, 243, 245, 310, 311  
 Williams, T. F., 350  
 Williams, T. W., 28  
 Williamson, E. R. D., 380, 381, 382, 383, 394  
 Williamson, M., 339, 340, 352  
 Willis, C. J., 107, 113  
 Willoughby, D. A., 105, 106, 107, 111, 112, 113, 116, 119, 120, 121, 122  
 Willoughby, E., 336  
 Wilson, J. B., 161, 173  
 Wilson, J. F., 395  
 Wilson, R. J., 93, 95  
 Wilson, S., 398

- Wilson, S. G. G., 6  
 Windhager, E. E., 75, 76,  
 77, 80, 90, 271  
 Windhorst, D. B., 123,  
 124  
 Winkelstein, A., 394  
 Winkur, G., 367, 368, 369,  
 370  
 Winter, C. A., 105, 106  
 Winter, S., 12  
 Winter, T. S., 209  
 Winterhalter, K. H., 164,  
 166  
 Winterling, C. A., 243,  
 251  
 Winters, R. W., 350  
 Wintour, M., 79  
 Wintrobe, M. M., 106,  
 107  
 Wise, B. L., 83, 89, 90,  
 92  
 Witkowski, R., 394, 395  
 Witte, C. L., 276  
 Witte, M. H., 272, 274,  
 276  
 Wittenborn, J. R., 373  
 Witts, L. J., 150  
 Wochner, R. D., 289  
 Wodinsky, I., 438  
 Woelber, K. A., 227  
 Wohl, R. C., 163  
 Wojciechowski, Z., 210  
 Wolf, A., 209  
 Wolf, J. C., 310  
 Wolf, U., 380, 383,  
 394  
 Wolff, B. B., 69, 70  
 Wolff, F. W., 234  
 Wolff, O., 341, 344  
 Wolff, S. M., 293  
 Wolf-Jurgensen, P., 106  
 Wolfson, J. J., 123,  
 124  
 Wollheim, F. A., 287, 288,  
 289  
 Wong, D., 111  
 Wong, P. W. K., 342,  
 350  
 Wong, V. G., 123  
 Wood, F. C., Jr., 224, 225,  
 233  
 Wood, J. A., 102  
 Woodhour, A. F., 28,  
 214  
 Woodliff, H. J., 379, 380,  
 381, 383, 384, 386, 389,  
 394  
 Woodruff, R. A., Jr., 369  
 Woods, J. S., 435  
 Woods, S., Jr., 116  
 Woolf, L. I., 440  
 Wooster, M. J., 77, 88  
 Worford, L. R., 345  
 Work, K., 201, 202  
 Worning, H., 304, 306  
 Worowski, K., 139  
 Worth, A., 396, 397, 398  
 Wranne, L., 341, 342  
 Wray, H. W., 49, 50  
 Wright, C. E., 161  
 Wright, D. H., 399  
 Wright, F. S., 88, 270  
 Wright, P. H., 226  
 Wright, P. J., 311  
 Wright, R. D., 79  
 Wrightstone, R. N., 173  
 Wriston, J. C., Jr., 434,  
 435  
 Wroldsen, A., 256  
 Wrong, D. M., 139  
 Wrong, O., 264  
 Wyman, J., 159, 173  
 Wyngaarden, J. B., 335,  
 344, 360  
 Wynn, V., 81  
 Wynter, C. V. A., 147
- Y
- Yagi, Y., 187  
 Yagodka, E. G., 109  
 Yagura, T., 211  
 Yajima, Y., 28  
 Yakulis, V., 159, 285, 286,  
 290  
 Yalow, R. S., 233, 243,  
 251  
 Yam, L. T., 380, 386,  
 399  
 Yamada, K., 379, 396, 397,  
 398  
 Yamada, M., 27  
 Yamamoto, K., 172  
 Yamamura, Y., 159  
 Yamane, Y., 262, 263  
 Yanase, T., 161  
 Yankee, R. A., 320  
 Yankopoulos, N. A., 78,  
 269, 270  
 Yates, A., 162, 165,  
 166  
 Yeckles, L., 292  
 Yellin, T. O., 434  
 Yen, S. S., 230  
 Yin, F. H., 23  
 Yokoyama, Y., 347  
 Yoneda, C., 30  
 Yonekura, Y., 210  
 Yoran, C., 140  
 Yoshida, A., 159, 163,  
 173  
 Yoshida, T., 347  
 Young, J., 139  
 Young, J. D., 225, 226, 303,  
 304, 305, 309  
 Young, M. S., 253  
 Young, O. M., 324  
 Young, W. G., Jr., 49,  
 272  
 Younger, J. S., 17, 18, 19,  
 20, 21, 22, 24, 25, 26, 28,  
 33  
 Yu, C. I., 169  
 Yuceoglu, A. M., 7
- Z
- Zabriskie, J. B., 7  
 Zachariae, H., 112,  
 113  
 Zackheim, H. S., 59-66  
 Zajdela, F., 31, 32,  
 38  
 Zajtchuk, R., 301  
 Zang, K. D., 379, 397  
 Zarate, G., 173  
 Zarco, R. M., 12  
 Zasukina, G. D., 211  
 Zebrowski, E., 114  
 Zee, P., 438  
 Zeleznick, L. D., 31,  
 32  
 Zelickson, A. S., 124  
 Zell, L., 62  
 Zelli, G. P., 396, 398  
 Zepp, H. D., 293  
 Zetterstrom, R., 349  
 Zeya, H. I., 122  
 Zgliczynski, S., 260, 263  
 Zhandov, V. M., 33  
 Ziegler, J. T., 185  
 Ziegler, M., 62  
 Zierler, K. L., 229, 245,  
 246, 248  
 Zimmerman, A. M., 93  
 Zimmerman, B., 362  
 Zimmon, D., 276  
 Zinkham, W. H., 162  
 Zipes, D. P., 54  
 Zito, R., 173  
 Zitova, D., 204  
 Zittoun, R., 399  
 Zollinger, R. M., 313  
 Zotti, E., 272  
 Zuber, C., 284, 286, 287,  
 289  
 Zucker-Franklin, D., 121,  
 182  
 Zuckerman, A. J., 19  
 Zuckner, J., 362  
 Zuelzer, W. W., 380, 381,  
 386, 388, 389, 390  
 Zunz, E., 299  
 Zweifach, B. W., 71, 105,  
 110, 111, 112, 113, 122,  
 349

# SUBJECT INDEX

## A

- Abortion
  - from abnormal hemoglobins, 158, 160
  - septic mycoplasma in, 179, 184
  - spontaneous chromosomal abnormalities in, 430
- Abruptio placentae
  - microangiopathic hemolytic anemia following, 140
- Absorption
  - of iron, 145-56
- Acetoacetate
  - on insulin secretion, 225
- Acetone
  - clastogenic action of, 411, 422
- Acetophenon
  - clastogenesis by, 411, 414, 417
- Acetylcholine
  - on ADH release, 262
  - on heart, 48
  - on insulin secretion, 226
  - pain production by, 69-71
  - on pancreatic secretion, 310
  - sodium diuresis by, 93
- $\beta$ -N-Acetylhexosaminidase
  - in Tay-Sachs disease, 325
- N-Acetylneuraminic acid
  - in cerebral lipidoses, 320
- Acetylsalicylic acid (aspirin)
  - clastogenesis by, 411, 414, 416
  - in inflammation, 359
- Acidosis
  - and cardiac arrhythmias, 54-55
- Acridine
  - clastogenesis by, 411, 420-21
- Acridine-half mustard (ICR-170)
  - clastogenesis by, 411, 421
- Acridine orange
  - clastogenesis by, 411, 421
- Acridine yellow
  - clastogenesis by, 411, 421
- Acriflavin
  - clastogenesis by, 411, 421
- Acromegaly
  - glucose response in, 222, 231
- Actidione
  - clastogenesis by, 411, 420-21
- Actinomycin D
  - clastogenesis by, 411, 414-15
  - topical use of, 61
- Adenine
  - clastogenesis by, 411, 414
- Adenine deoxyriboside
  - clastogenesis by, 411, 414
- Adenine nucleotides
  - in pain production, 70
- Adenocarcinoma
  - ADH problems in, 263
  - with microangiopathic hemolytic anemia, 141-42
- Adenoids
  - $\gamma$ E-immunoglobulins in, 193
- Adenoma
  - pancreatic secretory disorders in, 313
- Adenosine
  - in pain production, 70
- Adenoviruses
  - as interferon inducers, 18, 29-31
- ADH
  - see Antidiuretic hormone; Vasopressin
- Adipocytes
  - hypertrophy of and insulin sensitivity, 229
  - in obesity, 241-42
- Adipose tissue
  - lipolysis in agents stimulating, 301
- Adrenalectomy
  - on interferon induction, 24
- Adrenal glucocorticoid deficiency
  - and water excretion, 260, 263
- Adrenal steroids
  - on insulin secretion, 231
- alpha-Adrenergic blockers
  - on insulin release, 227
- Adrenocortical steroid
  - brain levels of in depression, 375-76
- Adrenocorticotropin (ACTH)
  - on interferon induction, 24
- Aflatoxin
  - clastogenesis by, 411, 424
- Agammaglobulinemia
  - serum immunoglobulins in, 289
- Aglycogenesis
  - description and treatment of, 344
- Albumin
  - inflammatory response to, 106-9
  - vascular changes by to study natriuresis, 90-91
- Alcohol
  - on ADH release, 262
- Alcoholism
  - and depression, 368, 373
  - and iron absorption, 154-55
- Aldosterone
  - control of secretion of, 78-80
  - angiotensin effects, 80
  - historical aspects of, 78
  - in edema, 270, 272, 274-77
  - on urinary sodium excretion, 76-78, 93-94
  - on water excretion, 265-66
- Allogene
  - in body cells, 69
- Alkylating agents
  - clastogenesis by, 418-19
- Allergy
  - human reaginic antibodies, 187-200
- Allopurinol
  - in hyperuricemia, 345, 348
  - on serum uric acid levels, 360
- Altitude
  - and iron absorption, 149-50
- Amino acids
  - inflammatory response to, 108
  - and insulin secretion, 223-25, 233, 250, 307-9
  - transport defect in Hartnup's

- disease, 349
- 5-Aminoacridine  
clastogenesis by, 411, 421
- delta-Aminolevulinic acid  
in porphyria, 347-48
- Aminopterin  
clastogenesis by, 411, 421-22
- para-Aminosalicylate  
clastogenesis by, 413-14, 416
- Amiripryline  
antidepressant use of, 370-71
- Ammonia  
blood  
  in L-asparaginase therapy, 439  
  disorders with elevated blood urea, 342-44
- Amniocentesis  
to detect Gaucher's disease, 321
- Amniotic cell culture  
to find inborn metabolic errors, 338, 344
- Amphetamines  
in depression, 372
- Amylo-1,6-glucosidase  
defective, 344
- Anaphylatoxin  
formation of, 10
- Anemias  
congenital nonspherocytic hemolytic  
  abnormal hemoglobins in, 160-67, 172-73  
  edema with, 275  
  iron deficiency and iron absorption, 149  
  therapy of, 146  
  iron overload in, 155  
  megaloblastic  
    thiamine-responsive, 346  
  microangiopathic hemolytic, 133-44  
  and complications of pregnancy, 139-40  
  definition and description of, 133-34  
  experimental models, 134-37  
  hemolytic uremic syndrome, 137-38  
  malignant hypertension, 138-39  
  and metastatic malignancy, 140  
  and miscellaneous diseases, 141  
  summary and conclusion, 141-42  
  and thrombotic thrombocytopenic purpura, 140-41  
  refractory
- chromosomal changes in, 390  
  see also Iron absorption
- Anesthesia  
  on ADH release, 263  
  on insulin release, 227
- Angioedema, hereditary immunologic aspects of, 11
- Angiotensin  
  on edema, 271-72
- Angiotensin II  
  on aldosterone secretion, 78-80, 91, 93-95
- Animals, domestic  
  Mycoplasma diseases of, 179
- Antiarrhythmic drugs  
  in acute myocardial infarction arrhythmias, 49-53  
  choice of, 53
- Antibiotics  
  clastogenic, 410, 413-15
- Antibodies  
  human reaginic, 187-200  
  characterization of, 190-92  
  correlation between  $\gamma$ E antibodies and reaginic activity, 187-90  
  distribution in tissue, 193  
  formation and metabolism of, 192-94  
  immunochemical properties of, 194-97  
  introduction to, 187  
  molecular basis of reaginic hypersensitivity, 198-99  
  radioimmunoassay study of, 188  
  radioimmuno-electrophoretic study of, 189  
  summary, 199  
  synthesis site, 193  
  mucosal, 281-98  
  see also Immunoglobulins
- Anticholinergics  
  on ADH release, 262
- Antidepressants  
  clastogenesis by, 415  
  evaluation of, 372-74  
  types of use, 370  
  see also Depression
- Antidiuretic hormone (ADH)  
  characteristics of tissue, plasma, and tumor antidiuretic principle, 264  
  clinical states associated with increased secretion of, 263  
  and impaired water excretion, 259-67  
  appropriate and inappropriate ADH release, 261-66  
  known stimuli and inhibitors of, 262  
  see also Vasopressin
- Antigen-antibody complexes  
  soluble  
    qualitative and quantitative aspects of, 4
- Anti-inflammatory drugs  
  rank of effectiveness of, 359
- Antimetabolites  
  topical, 59-66
- Antirheumatic drugs  
  in inflammation, 105
- Appendix  
  immunoglobulins in, 282
- Aqueous humor  
  interferon in, 35
- Arboviruses  
  as interferon inducers, 18
- Arginine  
  and inflammation, 108  
  on insulin secretion, 224  
  Mycoplasma requirement for, 184
- Arginosuccinic aciduria  
  description and treatment of, 343
- Arrhythmias  
  antiarrhythmic drugs, 49-53  
  choice of, 53  
  diphenylhydantoin, 51-52  
  lidocaine, 50-51  
  procainamide, 50  
  propranolol, 52-53  
  quinidine, 49-50  
  causes of, 48-49  
  incidence of, 47-48  
  other forms of therapy of, 53-55  
  cardiac surgery, 55  
  control of metabolic imbalances, 54-55  
  electrical pacing, 54  
  electroshock, 53-54  
  prophylactic drugs, 55  
  prophylaxis of, 55  
  treatment of, 47-58  
  general discussion of, 55-56
- Arsenates  
  clastogenesis by, 411, 423
- Artery, carotid  
  constriction of and aldosterone secretion, 85
- Arthritis  
  cause of pain in, 70-71  
  colchicine in diagnosis of, 362  
  Mycoplasma in, 179, 184  
  rheumatoid

- negative correlation with  
gout, 361
- Arthus reaction  
anticoagulant inhibition of,  
109  
block of, 13
- Arylsulfatase A  
in metachromatic leukodys-  
trophy, 323, 325
- Ascorbic acid  
on iron absorption,  
146
- L-Asparaginase, 433-44  
combination chemotherapy,  
438  
introduction, 433-34  
nature of, 434-35  
physiologic disposition,  
436-37  
predictive tests, 435-36  
spectrum of clinical efficacy,  
437-38  
toxicity of, 436-42  
clinical indication to cease  
therapy, 441-42  
hypersensitivity, 440-  
41
- Asparagine  
in biosynthesis of nucleotides,  
435
- Aspirin  
see Acetylsalicylic acid
- Astrocytoma  
and Toxoplasma, 210-  
11
- Atropine  
on ADH release, 262  
on pancreatic secretions,  
310
- Autoimmune disorders  
Mycoplasma implication in,  
185
- Autonomic nervous system  
in controlling pancreatic  
function  
hormonal interaction, 306-  
7  
in edema, 270  
and insulin secretion, 226
- 6-Azacytidine  
clastogenesis by, 411,  
414
- Azaaserine  
with L-asparaginase, 438  
clastogenic action of, 410-  
11, 414-15
- Azathioprine  
clastogenesis by, 411, 424
- Azauridine  
clastogenesis by, 411, 414
- Aziridine  
clastogenesis by, 411,  
419
- B**
- Bacteria  
as interferon inducers,  
17-18
- Bantu peoples  
iron overload in, 153-  
54
- Barbiturates  
on ADH release, 262-63  
in depression, 372-73
- Bee venom  
pain production by, 72
- Benzene  
inflammatory response to,  
108
- Benzpyrene (Benzo(a)pyrene)  
clastogenesis by, 411, 417-  
18  
on interferon induction,  
34
- Beri-beri  
edema of, 275
- Beryllium  
inflammatory response to,  
107
- Besnotia jellisoni  
immune studies of, 208
- Bicarbonate  
stomach output of  
in response to food, 304-  
5
- Bile  
immunoglobulins in, 282-  
83  
secretion of  
agents stimulating, 301
- Bile salts  
and itch, 69
- Bipyridine  
clastogenesis by, 411,  
420
- Blood  
dilution of  
and sodium excretion, 89-  
90  
 $\gamma$ E-immunoglobulins in,  
193  
transfusions  
iron overload from, 155
- Blood cells  
see specific types
- Blood pressure  
on ADH release, 262  
and control of sodium excre-  
tion, 92-95  
and edema, 269  
effect of bed tilt on, 94  
and renin release, 82-87  
technique of changing arteri-  
al mean and pulse pres-  
sure independently, 84
- Blood vessels  
expansion of  
separate from blood dilu-  
tion, 89  
response to inflammation by,  
106-11  
and sodium excretion, 82-  
89
- see also specific ones
- Blood volume  
on ADH release, 262-  
63  
and edema, 270, 272, 274
- Bloom's syndrome  
see under Syndromes
- Bohr shift  
in hemoglobin, 169-70,  
173-74
- Bone marrow  
aneuploidy in  
in acute myeloblastic  
leukemia, 384  
in chronic myelocytic  
leukemia, 384  
in diagnosis of cerebral  
lipidoses, 320  
effects of L-asparaginase  
therapy on, 441  
 $\gamma$ E-immunoglobulins in,  
193  
interferon induction in cells  
of, 24
- Philadelphia chromosome  
in, 379-81, 383, 385-88  
origin of marrow cells,  
387-88  
problems of  
with hemolytic anemia,  
167  
role in iron absorption, 148-  
50
- Bordetella pertussis  
interferon induction by,  
18
- Bothrops jararaca  
pain produced by, 72
- Bowel  
immunoglobulins in, 294  
iron absorption from,  
146
- Bradykinin  
and inflammation, 109-10,  
112-13, 122, 361  
on itch, 68  
in pain production, 70  
sodium diuresis by, 93
- Brain tumors  
with ADH abnormalities,  
263  
and Toxoplasma, 210-  
11
- 5-Bromodeoxyuridine  
clastogenesis by, 411, 414
- Bromolysergic acid  
clastogenesis by, 411, 414-  
16
- Brucella abortus  
as interferon inducer,  
18
- Brucella melitensis  
Toxoplasma-induced resist-  
ance to, 208
- Brucella suis  
interferon induction by,  
30



Burkitt's lymphoma  
chromosomal changes in,  
399  
interferon induction in,  
19  
Burns  
insulin problems with,  
227  
Busulfan  
clastogenesis by, 411, 420

C

Caerulein  
isolation and properties of,  
301-2  
structure of, 302  
Caffeine  
clastogenesis by, 411, 414,  
416-17  
Calcium  
deficiency of  
clastogenic effects of, 411,  
423  
and leukocyte adhesiveness,  
111, 120  
Calcium oxalate  
to induce inflammation,  
359  
Calcium phosphate  
to induce inflammation,  
359  
Calcium pyrophosphate dihydrate (CPPD) crystal  
to study gouty inflammation,  
357-58, 360-61  
Cancer  
distribution of modal number  
of chromosomes in, 396  
and susceptibility to toxoplasmosis, 209  
Candida albicans  
interferon induction by,  
18  
secretion of antibodies  
against, 293  
Cannabis  
clastogenesis by, 411, 415-16  
Cantharadin blister  
to study inflammation,  
106  
to study itch and pain, 67-68  
Capillary pressure  
and edema, 271  
Captan  
clastogenesis by, 411, 418-19  
Carbamylcholine  
on insulin secretion, 226  
Carbamylphosphate synthetase  
deficiency of, 343-44  
Carbohydrate  
on pancreatic secretions,  
309  
Carbon 14

clastogenesis by, 412,  
425-26  
Carbon tetrachloride  
clastogenesis by, 411,  
422  
inflammatory response to,  
108  
Carcinogens  
on interferon induction,  
24-25  
Carcinoma  
bronchogenic  
ADH problems in, 263-65  
with hemolytic anemia, 140-42  
squamous cell  
topical antimetabolites  
against, 59  
Cardiovascular system  
pressure control of renin  
release, 82-87  
Carrageenin  
and inflammation, 106  
Catechol  
clastogenesis by, 411,  
422  
Catecholamines  
on heart, 48  
in inflammatory response,  
113  
and insulin secretion, 222,  
226-27  
red cell damage by, 137  
Catecholes  
on insulin secretion, 226  
Caviodea  
L-asparaginase from,  
434  
Central nervous system (CNS)  
disorders of  
ADH abnormalities with,  
263  
excitability of  
in depression, 374-75  
toxoplasmosis effect on,  
209-11  
Centrifugal force  
clastogenesis by, 411,  
426  
Ceramide  
structure of, 318  
Ceramide lactoside  
in Gaucher's disease,  
319  
structure of, 318  
Ceramide trihexosidase  
in Fabry's disease, 325,  
327-28  
Ceramide trihexoside  
in Fabry's disease, 327  
structure of, 318  
Cereals  
availability of iron in,  
152  
Cerebral lipidoses, 317-34  
conclusion, 331

Fabry's disease, 327-28  
Gaucher's disease, 317-22  
generalized gangliosidosis,  
329  
globoid leukodystrophy,  
328-29  
metachromatic leukodystrophy,  
322-24  
Niemann-Pick disease, 324-27  
structures of sphingolipids,  
318  
Tay-Sachs disease, 329-31  
Cerebrospinal fluid  
interferon in, 35  
Chediak-Higashi syndrome  
see under Syndromes  
Chemotactic factors  
in inflammation, 115-17  
Chikungunya virus  
on interferon induction,  
27  
Children  
acute lymphoblastic leukemia in, 398  
cystic fibrosis in, 99-100  
dietary treatment of inborn  
metabolic errors, 335-52  
hemolytic-uremic syndrome  
of, 133, 137-38  
renal disease in  
following bacterial infection,  
7-8, 11  
Chironex fleckeri  
pain from venom of,  
72  
Chlamydia  
as interferon inducers, 18  
Chloral hydrate  
clastogenesis by, 411, 415-16  
Chloramine T  
clastogenesis by, 411, 417-18  
Chloramphenicol  
clastogenesis by, 411, 414-15  
Chlordiazepoxide  
in depression, 372  
3-(O-Chlorobenzyl)-salicylic  
acid  
on complement, 13  
1,3bis(2-Chloroethyl)nitrosourea (BCNU)  
with asparaginase, 438  
Chloroform  
inflammatory response to,  
108  
Chlorpromazine  
antidepressant use of,  
371

- clastogenesis by, 411, 415-16  
 Chlorpropamide  
   on ADH release, 263  
 Cholecystokinin  
   see Pancreozymin-cholecystokinin  
 Cholesterol  
   in obesity, 243  
 Cholestyramine  
   on itch, 68-69  
 Chondrocalcinosis  
   crystal of, 357  
 Chromosomes  
   abnormalities in  
     in human neoplasia, 379-408  
   abnormal "marker" type, 397, 399  
   cytogenetic appearance of unstable chromosomes, 429  
   damage to by chemical agents, 409-32  
     see also Clastogenic compounds  
   diagrammatic representation of stable rearrangements of, 427  
   diagrammatic representation of unstable rearrangements of, 428  
   Melbourne  
     in lymphoma, 399  
     missing Y, 382-83  
     Philadelphia (Ph<sup>1</sup>), 379-88, 392-94  
 Chymotrypsin  
   and inflammation, 108  
 Cirrhosis  
   and cystic fibrosis, 100  
   edema of, 275-76  
   impaired water excretion with, 263, 265  
   and iron absorption, 154-55  
 Citrullinemia  
   description and treatment of, 343-44  
 Clastogenic compounds  
   acridines and other photodynamic dyes, 420-21  
   air and water pollutants, 417-18  
   alcohols and other organic solvents, 422-23  
   alkylating agents, 418-19  
   alphabetical list of, 411-13  
   antibiotics, 410, 413-14  
   antifolic compounds, 421-22  
   classes of, 410  
   C-mitotic agents and prophase poisons, 419-21  
   CNS drugs, 414-16  
   conclusion, 431  
   definition of, 409  
   food ingredients, additives, and preservatives, 416-17  
   genetic and clinical significance of, 425-27  
   inorganic chemicals, 423  
   insecticides and plant growth inhibitors, 418-19  
   miscellaneous compounds, 424  
   monitoring population for increased chromosome breakage, 428-31  
   nucleic acid-related compounds, 410, 414  
   physical agents, 424-26  
   summary of results of survey of newborns for chromosomal defects, 431  
 Clorox  
   clastogenesis by, 411, 417-18  
 Clostridium welchii  
   inflammatory response to, 107  
 Coagulation factors  
   in inflammatory response, 108-9  
 Cobra venom factor  
   and C3 lytic factor, 12-13  
   on complement level, 362  
 Colchicine  
   anti-inflammatory use of, 359  
   clastogenesis by, 411, 419, 421  
   on leukocytes, 362-64  
   mechanism of action of, 362-64  
 Colchicine derivatives  
   topical use of, 62  
 Colimycin  
   on interferon induction, 25  
 Coliphage  
   interferon induction by, 18  
 Collagen  
   lysosomal enzyme effects on, 122  
 Colon  
   immunoglobulins in, 282, 284  
 Colostrum  
   immunoglobulins in, 282, 284-85, 290, 292  
 Columbia SK virus  
   interferon induction by, 29-30  
 Common cold virus  
   on interferon induction, 35  
 Complement  
   absorption by urate crystals, 362  
   chemotactic factors from, 115-17  
   C3 lytic factor, 12  
   components of complement system, 10-11  
   effect of immunoglobulin E on, 197, 199  
   inflammatory role of, 117-19, 121  
   inhibition of, 12-13  
   in renal disease, 4, 8-13  
   Compound 48/80  
     on inflammatory response, 107, 111  
   Compound 1935L  
     and itch production, 68  
   Condyloma acuminatum  
     topical treatment of, 64  
   Contraceptives, oral  
     and insulin secretion, 230  
   Corn oil  
     on insulin secretion, 225  
   Corticosteroids  
     anti-inflammatory use of, 359  
     on insulin secretion, 231  
     on interferon induction, 24, 28  
     and susceptibility to toxoplasmosis, 209-10  
   Corticotropin  
     effects of salt deprivation and repletion on, 78  
   Cortisol  
     in obesity, 243, 246, 252  
     and water excretion, 267  
   Cortisone  
     and toxoplasmosis susceptibility, 210  
     on urinary sodium excretion, 78  
   Coxiella burnetii  
     as interferon inducer, 18  
   Coxsackie, B5 virus  
     secretion of antibodies against, 293  
   Croton oil  
     inflammatory response to, 106  
   Crypts of Lieberkuhn  
      $\gamma$ E-immunoglobulins in, 193  
   Cushing's syndrome  
     see under Syndrome  
   Cyclamate  
     clastogenesis by, 411, 416-18  
   Cyclohexane  
     clastogenesis by, 411, 422  
   Cycloheximide

# SUBJECT INDEX

479

- interferon induction by,
  - 18, 21-22
- Cyclohexylamine
  - clastogenesis by, 411, 416-17
- Cyclophosphamide
  - clastogenesis by, 411, 420
  - on interferon induction, 28
- Cystathioninuria
  - description of, 347
- Cystic fibrosis
  - in adults, 99-104
  - bioassay, 103
  - clinical manifestations, 100-1
  - diagnosis of, 101-2
  - heterozygous individuals, 102-4
  - summary, 104
  - survival, 100
- Cytoaxigens
  - in inflammation, 115
- Cytoxins
  - in inflammation, 115
- Cytomegalovirus
  - interferon induction by, 30
  - and toxoplasmosis, 209-10, 12
- Cytoplasmic polyhedrosis virus
  - interferon induction by, 18
- Cytosine arabinoside
  - with L-asparaginase, 438
  - clastogenesis by, 411, 414
  - topical use of, 61
- D
- Daunomycin
  - clastogenesis by, 411, 414-15
  - in combination cancer chemotherapy, 438
- Demecolcine
  - clastogenesis by, 411, 420-21
  - topical use of, 62
- 2-Deoxyglucose
  - on insulin secretion, 223
- Deoxyribonucleic acid (DNA)
  - as antigen, 6-7
  - L-asparaginase effects on, 435
  - on interferon induction, 18, 29
- Depression, mental
  - biochemical pharmacology of, 374-76
  - diagnostic classification, 368-70
  - epidemiology, 367-68
  - etiology, 368
- symptomatology, 367
- treatment of, 370-74
- chemotherapy, 371-72
- evaluation of, 372-74
- Dermatitis
  - itch of, 68
- Dermatology
  - topical antimetabolites, 59-66
- Desipramine
  - antidepressant use of, 370-71
- Dexamethasone
  - on depression, 376
- Dextran
  - vascular changes by to study natriuresis, 90
- Dextran phosphate
  - interferon induction by, 18
- Diabetes mellitus
  - and cystic fibrosis, 100
  - hyperinsulinism of, 232-33
  - from intestinal endocrine disorders, 314
- Diabetics
  - glucose response of, 222
  - inflammatory response in, 125
- Diazoxide
  - in glycogen disease, 345
  - on insulin secretion, 233-34
- Dichlorodiphenyltrichloroethane (DDT)
  - clastogenesis by, 411, 418-19
- Diepoxybutane
  - clastogenesis by, 411, 419-20
- Diepoxypropylether
  - clastogenesis by, 411, 419-20
- Diet
  - to treat inborn metabolic errors, 335-56
- Diethylaminoethyl (DEAE)-dextran
  - on interferon induction, 25
- Diethylsulfate
  - clastogenesis by, 411, 420
- Digitoxin
  - and inflammation, 106
- Di Guglielmo's syndrome
  - see under Syndromes
- 3, 5-Diiodo-salicylic acid
  - on complement, 13
- Dimenhydrinate
  - clastogenesis by, 411, 415-16
- 7, 12-Dimethylbenzanthracene
  - on interferon induction, 25
- 3-(1, 1-Dimethyl-propyl)-salicylic acid
  - on complement, 13
- Dimethylsulfate
  - clastogenesis by, 411, 420
- Dimethylsulfoxide (DMSO)
  - clastogenesis by, 411, 424
  - and inflammation, 106
- Dimethylurethimine
  - topical use of, 61
- 2, 4-Dinitrophenol
  - clastogenesis by, 411, 422
- Diphenylhydantoin
  - on ADH release, 262
  - antiarrhythmic use of, 51-52
  - on insulin secretion, 234
- Diphtheria toxin
  - on interferon induction, 30
- Disaccharidase deficiency,
  - 335-37
  - lactase, 336
  - sucrase and isomaltase, 336-37
- Diseases
  - Bowen's chromosomal changes in, 398
  - topical treatment of, 59, 62
  - chronic granulomatous, of children
  - inflammatory response in, 123
  - Fabry's, 327-28
  - biochemical lesion in, 327
  - diagnosis of, 328
  - enzymatic defect in, 325
  - signs and symptoms, 327
  - treatment, 328
  - Gaucher's, 317-22
  - antenatal detection of, 321
  - biochemical lesion, 319
  - diagnosis of, 320-21
  - enzymatic defect in, 325
  - genetics of, 318
  - signs and symptoms, 317-18
  - source of accumulating glucocerebroside, 319-20
  - treatment of, 321-22
  - Hartnup's dietary treatment of, 349-50
  - Hemoglobin B Kansas, 158
  - Hemoglobin C and D, 158, 172
  - Hemoglobin E Punjab, 158

- Hodgkin's  
chromosomal changes in,  
388-99  
inflammatory response in,  
124  
and susceptibility to toxo-  
plasmiasis, 209  
Krabbe's  
globoid leukodystrophy  
possible etiology of, 328-  
29  
Maple syrup urine  
dietary treatment of,  
344  
Niemann-Pick, 324-27  
biochemical lesion, 324-  
26  
diagnosis, 326  
enzymatic defect in, 325  
genetics, 326  
signs and symptoms,  
324  
treatment, 326-27  
Refsum's  
description and treatment  
of, 338-39  
renal  
immunologic aspects of,  
1-16  
sickle-cell  
abnormal hemoglobulins  
of, 158  
molecular aspects of hemo-  
globin of, 171-72  
treatment of, 171-72  
Tay-Sachs, 329-31  
diagnosis, 331  
enzymatic defect in,  
325  
genetics, 329  
pathological chemistry,  
329-31  
Diuretics  
on insulin secretion, 234  
on water excretion, 260  
Divinyl ether and maleic acid  
anhydride (pyran)  
on Toxoplasma resistance,  
214  
Dog  
experimental edema in,  
269-73  
Dopa  
and inflammation, 113  
Dopamine  
in congestive heart failure,  
treatment with, 274  
and inflammation, 113  
sodium diuresis by, 93  
Down's syndrome  
see under Syndromes  
Duodenum  
adenocarcinoma of  
ADH problems in, 263  
hormone secretion in,  
225  
iron absorption from, 146,  
150  
E  
Eaton agent  
history of identification of,  
179-81  
Eclampsia  
hemolysis with, 139  
Edema, 269-80  
on ADH secretion, 263  
in dog  
experimental, 269-73  
in man, 273-77  
cirrhosis of liver, 275-  
76  
congestive heart failure,  
273-75  
nephrosis, 276-77  
summary, 277-78  
Egg white  
 $\gamma$ E antibodies against,  
188  
Electroconvulsive therapy  
in depression, 371-73  
Electroimmunodiffusion  
to detect mucosal antibodies,  
282  
Electromagnetic fields  
clastogenesis by, 411, 425-  
26  
Electroshock  
in treatment of tachyarrhyth-  
mias, 53-54  
Encephalomyelitis  
interferon induction in, 29-  
30  
Endocarditis  
subacute bacterial  
renal disease following,  
10  
Endometrium  
hyperplasia of  
chromosome changes in,  
398  
Endopeptidases  
pruritogenesis by, 68  
Endotoxins  
and inflammation, 118,  
123  
as interferon inducers, 17-  
18, 20, 26-27  
Enterovirus vaccines  
interferon induction by,  
19  
Enzymes  
pain produced by, 72  
Epinephrine  
on ADH release, 262  
and inflammation, 113  
on insulin secretion, 226,  
310  
on interferon induction,  
24  
on renin release, 86  
Epithelioma  
superficial basal cell  
topical treatment of, 59  
Erwinia caratovora  
L-asparaginase from, 434,  
441  
Erythema multiforme  
Mycoplasma in, 184  
Erythroblastosis  
immunoglobulins in, 289  
Erythrocytes  
and hemolysis, 134-37  
structurally abnormal hemo-  
globins, 157-78  
Erythroleukemia  
chromosomal abnormalities  
in, 363, 386  
Erythropoiesis  
and iron absorption, 148-  
50  
Escherichia coli  
L-asparaginase from, 434,  
441  
and inflammation, 115  
on interferon, 18, 34  
Esterases  
pain produced by, 72  
Ethacrynic acid  
on water excretion, 260  
Ethanol  
clastogenesis by, 412,  
422  
on galactose oxidation, 338  
in obesity, 253  
see also Alcoholism  
8-Ethoxycaffeine  
clastogenesis by, 412,  
414  
Ethyl acetate  
clastogenesis by, 412, 422  
Ethyl carbamide  
clastogenesis by, 412, 418,  
420  
Ethylene oxide  
clastogenesis by, 412, 419-  
20  
Ethyleneimine  
clastogenesis by, 412, 419-  
20  
Ethylmethanesulfonate  
clastogenesis by, 412, 419-  
20  
Etiocholanolone  
on inflammation, 108  
Exercise  
on insulin secretion, 226  
Exotoxins  
interferon induction by,  
18  
F  
Fabry's disease  
see under Diseases  
Fanconi's syndrome  
see under Syndromes  
Fatty acids  
on insulin secretion, 224-  
25, 307

- in obesity, 243, 248, 258
- Fetus
- interferon in blood of, 35
- toxoplasmosis infection of, 206
- treatment of metabolic errors in, 338-39, 344
- Fibrinogen
- inflammatory response to, 108
- Fibroblasts
- in inflammation, 105
- Filipin
- and inflammation, 106
- 5-Fluorodeoxyuridine
- clastogenesis by, 412, 414
- 9-alpha-Fluorohydrocortisone
- in cystic fibrosis sweat test, 102
- 5-Fluorouracil (5FU)
- topical use of, 59-62, 65
- Folate
- congenital metabolic defect in, 347
- Folic acid antagonists
- clastogenesis by, 421-22
- Food
- absorption of iron from, 147, 152-54
- ingredients, additives, and preservatives
- clastogenesis by, 416-17
- irradiated
- clastogenesis by, 412
- pancreatic exocrine secretions in response to, 304-7
- Forearm
- basal glucose uptake across, 248-49
- Formic acid
- pain produced by, 71
- Francisella tularensis
- interferon induction by, 18
- Free fatty acids
- see Fatty acids
- Freund adjuvant
- on interferon induction, 28
- Friend leukemia virus
- on interferon induction, 31
- Fructose
- on insulin secretion, 223
- on iron absorption, 146
- Fructosemia
- description and treatment of, 338
- Fungal extracts
- interferon induction by, 18
- Furosemide
- on water excretion, 280
- G
- Galactocerebroside
- structure of, 318
- Galactose
- malabsorption syndrome, 349
- Galactosemia
- description and treatment of, 337-38
- $\beta$ -Galactosidase
- in gangliosidosis, 325, 329
- Gall bladder
- effects of peptides on musculature of, 302
- immunoglobulins in, 282, 291
- Gamma globulin
- inflammatory response to, 108, 118
- Gamma rays
- clastogenesis by, 412, 424-26
- Gammexane
- clastogenesis by, 412, 420-21
- Gangliosides
- in cerebral lipidoses, 320
- structure of, 318
- Gangliosidosis, generalized
- lipid storage problems in, 329
- Gastroctomy
- iron absorption after, 153
- Gastrin
- cellular source of, 312
- cross-reaction with pancreatico-cholecystokinin, 303-4
- on insulin secretion, 225
- structure of, 302
- Gastrins
- on pancreatic secretion, 300, 302-3, 305
- Gastroferrin
- on iron absorption, 146-47
- Gastrointestinal fluids
- immunoglobulins in, 283-84, 288, 291-92, 294
- Gastrointestinal secretagogues
- pancreatic effects of, 303
- Gastrointestinal secretions
- and iron absorption, 146-47
- Gaucher's disease
- see under Diseases
- Genetics
- of cerebral lipidoses
- Gaucher's disease, 318
- metachromatic leukodystrophy, 323
- Niemann-Pick disease, 325
- Pompe's disease, 326
- Tay-Sachs disease, 329
- chromosomal changes in human neoplasia, 379-408
- chromosomal damage by chemical agents, 409-32
- of cystic fibrosis, 99-102
- in etiology of mental depression, 368, 370
- inborn metabolic errors, 335-52
- Genital tract
- female
- immunoglobulins in, 290
- Gentourinary infection
- Mycoplasma in, 184
- Germiston virus
- on interferon, 30
- Globoid leukodystrophy (Krabbe's disease)
- see under Diseases
- Globoside
- in Fabry's disease, 327
- structure of, 318
- Globulins
- and inflammation, 113
- see also Immunoglobulins
- Glomerular basement membrane
- antibodies against, 2-4
- antigenic cross-reactivity, 2-3
- assays for, 3
- etiology, 4
- in normal urine, 3
- Glomerular filtration rate (GFR)
- see Kidney
- Glomerulonephritis
- immunologic aspects of, 1, 4, 6, 8-9, 12-14
- Glucagon
- on insulin secretion, 225, 233
- pancreatic secretion of, 304, 307-8, 310-11
- structure of, 301
- Glucagon-like immunoreactivity
- enteric
- characterization of, 308-9
- Glucocerebroside
- deficiency of, 320-22, 325
- in Gaucher's disease, 319-22
- structure of, 318
- Gluco-corticoids
- on insulin secretion, 231-32

- and water excretion, 266-67
- Gluconeogenesis**  
during starvation, 254-56
- Glucose**  
malabsorption syndrome, 349  
on normal insulin secretion, 221-23  
phasic nature of, 223  
on pancreatic endocrine secretion, 307-10  
tolerance  
in obesity, 243, 253-54
- Glucose-6-phosphatase**  
defective, 344-45
- Glutamine antagonists**  
synergism with L-asparaginase, 438
- Gluten-induced enteropathy**  
iron absorption in, 153
- Glycine**  
and inflammation, 106
- Glycogen diseases**  
description and treatment of, 344-45
- Goodpasture's syndrome**  
see under Syndromes
- Gout**  
experimental study of, 357-56  
negative correlation with rheumatoid arthritis, 361  
source of pain in, 70-71
- Griseofulvin**  
in gout, 364
- Growth hormone**  
on insulin secretion, 231  
in obesity, 243, 246, 251-52
- Guanethidine**  
on urinary sodium excretion, 93
- Guinea pig serum**  
L-asparaginase from, 434, 441
- Gut lumen**  
endocrine cells of, 312  
interferon in, 35  
iron absorption from, 145-49
- H**
- Hageman factor**  
and gouty inflammation, 360-61  
in inflammation, 106, 112-13  
in pain production, 70-71
- Hallucinogens**  
clastogenesis by, 415
- Hartnup's disease**  
see under Diseases
- Heart**  
acute myocardial infarction  
insulin problems with, 227  
treatment of ventricular extrasystoles and tachyarrhythmias in, 47-58  
on aldosterone secretion and sodium excretion, 85-86  
congestive failure of  
ADH secretion in, 263  
edema of, 273-75  
output  
on ADH release, 262-63  
and edema, 269, 272-73  
transplant  
problems of resistance in, 209
- Helenine**  
interferon induction by, 19
- Hemangioma, cavernous**  
microangiopathic hemolytic anemia with, 141
- Hematoid**  
structure of, 318
- Hemel**  
clastogenesis by, 412, 419
- Hemochromatosis, idiopathic**  
iron absorption in, 147, 154
- Hemodialysis**  
in Fabry's disease, 328
- Hemoglobin**  
structure of, 168-71  
amino acid sequence, 168, 170  
and function, 169-71  
subunit structure, 169
- Hemoglobins, structurally abnormal**, 157-78  
with abnormal function, 157-60  
decreased oxygen affinity, 160  
hemoglobins M, 160  
raised oxygen affinity, 157-60  
diseases caused by, 158, 161-63  
interpretation of, 168-74  
hemoglobins with deletions, 174  
substitutions at  $\alpha\beta$  contacts, 173  
substitutions at heme contacts, 172-73  
substitutions on inside of subunit, 172  
substitutions in internal cavity, 173-74
- substitutions on outside of molecule, 171-72  
list of variations in, 157  
unstable hemoglobulins, 160-68  
clinical features, 160-64  
detection of, 164-65  
pathogenesis of, 165-67  
treatment of, 167-68
- Hemolysis**  
abnormal hemoglobins in, 160-67  
and iron absorption, 149  
microangiopathic hemolytic anemia, 133-44
- Hemolytic-uremic syndrome**  
description of, 137-38
- Hemophilus influenzae**  
interferon induction by, 18
- Hemorrhage**  
on iron absorption, 149  
renin release during, 83, 86
- Hempa**  
clastogenesis by, 412, 419
- Heparin**  
in hemolysis, 139-41  
and inflammation, 109, 114  
on insulin release, 224
- Herpes simplex**  
encephalitis  
with ADH abnormalities, 263  
topical antimetabolite use in, 59, 64
- Herpes viruses**  
as interferon inducers, 18, 29-30  
and toxoplasmosis, 209-10
- Hexamethylene tetramine**  
clastogenesis by, 412
- Hexamethylmelamine**  
clastogenesis by, 412, 419
- Hexamethylphosphoramide**  
clastogenesis by, 412, 419
- Hexane**  
clastogenesis by, 412, 422
- Hexosaminidase**  
deficiency syndrome, 331
- Histamine**  
on complex localization, 5  
and inflammation, 106, 108, 110-11, 113-14, 122  
on interferon induction, 24  
and itch, 67-68  
on pain production, 69, 71

- release of  
  role of  $\gamma$ E-immunoglobulin  
    in, 195-98
- Histamine antagonists  
  in inflammation, 105
- Histamine liberators  
  and itch, 68
- Histone  
  on interferon induction,  
    25
- Hodgkin's disease  
  see under Diseases
- Homocystinuria  
  description and treatment  
    of, 341-42
- Homopolyribonucleotides  
  interferon induction by,  
    18
- Hormones  
  and urinary sodium excretion,  
    91-92
- Horse dandruff  
   $\gamma$ E antibodies against,  
    188
- Horseradish peroxidase  
  route of transport for,  
    292
- House dust  
   $\gamma$ E antibodies against,  
    188
- Human placental lactogen  
  on insulin secretion, 230
- Hydrogen 3  
  clastogenesis by, 412, 425-  
    26
- N-Hydroxy-acetylaminofluorene  
  on interferon induction,  
    25
- $\beta$ -Hydroxybutyrate  
  on insulin secretion, 225
- Hydroxylamine  
  clastogenesis by, 412,  
    424
- Hydroxyphenylnitrosamine  
  clastogenesis by, 411, 420
- Hydroxyurea  
  clastogenesis by, 412,  
    420
- Hyperglycinemia  
  dietary treatment of,  
    344
- Hyperlipemias, familial  
  dietary treatment of, 344
- Hypersensitivity reactions  
  to L-asparaginase, 439-  
    41
- Hypertension, malignant  
  microangiopathic hemolytic  
    anemia in, 136, 138-39,  
    142
- Hyperthyroidism  
  edema of, 275
- Hypertonic solutions  
  pain production by, 69
- Hyperttransfusion  
  and iron absorption,  
    149
- Hyperuricemia  
  description and treatment  
    of, 348-49
- Hypervolemia  
  dietary treatment of,  
    344
- Hypoglycemia  
  dietary treatment of, 344
- leucine-sensitive, 233
- Hyponitrites  
  clastogenesis by, 412,  
    422
- Hypoproteinemia  
  treatment of, 344
- Hypothermia  
  insulin problems with,  
    227
- Hypothyroidism  
  on water excretion, 260
- Hypoxia  
  and arrhythmias, 54-  
    55
- I
- Imipramine  
  antidepressant use of, 370-  
    73, 376
- Immune response  
  interferon induction as part  
    of, 27-29
- Immunoglobulins  
  A  
    chemical properties of,  
      284-86  
    immunological reactions  
      of, 288  
    isolation of, 284  
    properties of, 286  
    in renal disease, 4, 8  
    in secretory system, 281-  
      94  
    synthesis and transport of,  
      288-91  
  abnormalities in  
    chromosomal changes in,  
      395-400  
  comparison of properties  
    of, 191
- D  
  in secretory system,  
    284
- E  
  characterization of, 190-  
    92  
  correlation between anti-  
    bodies and reaginic acti-  
    vity, 187-90  
  formation and metabolism  
    of, 192-94  
  immunochemical properties  
    of, 194-97  
  molecular basis of reaginic  
    hypersensitivity, 198-99  
  physicochemical properties  
    of, 191  
  in secretory system,  
    281, 284  
  summary, 199  
  synthesis site, 183
- G  
  in renal disease, 2-4, 8-  
    10  
  in secretory system, 282-  
    85, 287, 289-92, 294
- M  
  in renal disease, 4, 8,  
    10  
  in secretory system, 281-  
    84, 294  
  Toxoplasma antibodies,  
    205-6  
  mucosal  
    structure and function of,  
      281-98  
  transport of  
    morphological aspects of,  
      291-92
- Immunology  
  interferon and interferon  
    induction, 17-46  
  of renal disease, 1-16  
  antibodies against glomerular  
    basement membrane, 2-  
    4  
  complement and leukocytes,  
    10-13  
  DNA as antigen, 6-7  
  mediators of inflammation,  
    9-13  
  miscellaneous antigens,  
    8  
  nonglomerular antigen-  
    antibody complexes, 4-  
    8  
  specific approaches to,  
    14  
  streptococcus as antigen,  
    7  
  virus as antigen, 7-8  
  of toxoplasmosis, 206-  
    9
- Immunosuppressives  
  and susceptibility to toxo-  
    plasmosis, 209-10
- Inborn metabolic errors  
  see Metabolism
- Indomethacin  
  in gout, 364
- Infantile subacute necrotizing  
  encephalopathy  
  thiamine dependency in,  
    346-47
- Infants  
  congenital toxoplasmosis  
    of, 206  
  immunoglobulins in, 288  
  iron absorption in, 153
- Inflammation  
  crystal-induced, 357-  
    66  
  crystal phagocytosis, 357-  
    58  
  mechanism of colchicine



- action, 362-64
  - mechanism of crystal formation, 359-60
  - pathogenesis of urate crystal-induced inflammation, 360-62
  - phagocytic properties of urate crystals, 358-59
- definition and description of, 105
- leukocytic mechanisms in, 105-32
  - cellular events, 119-21
  - chemotaxis, 115-17
  - conclusion, 125
  - in germ-free animals, 123
- humoral factors in, 111-13
- introduction, 105
- leukopenia and leukasthenia, 122-25
- lysosomes and tissue injury, 121-22
- role of coagulation factors, 108-9
- role of complement in, 117-19
- role of tissue mast cells, 113-15
- vascular mechanisms, 109-11
- methods for study of, 106-7
  - chemical methods, 106
  - induction of inflammation, 106
  - skin window and blister, 106-7
- response to various stimuli, 107-8
  - bacterial injury, 107
  - chemical injury, 107-8
  - thermal injury, 108
  - ultraviolet injury, 108
- reviews on, 105
- Influenza
  - secretory antibodies against, 293
- Insecticides
  - clastogenesis by, 418
- Insulin
  - and obesity, 243-51
    - basal hyperinsulinism, 248-51
  - factors underlying insulin resistance, 244-45
  - genesis of peripheral insulin resistance, 246-48
  - hyperinsulinism, 243-44
  - insulin turnover, 245
  - peripheral subresponsive-ness, 245-48
  - weight reduction, 253
- Insulinoma
  - insulin secretion in, 233-34
- Insulin secretion, 219-40
  - agents stimulating, 301
  - normal physiology, 220-27
    - acute insulin response, 221
    - autonomic nervous system
      - catecholamines, 226
    - basal insulin, 220
    - delayed insulin response, 220-21
    - free fatty acids and ketone bodies, 224-25
    - glucose, 221-23
    - gut hormones, 225-26
    - model of, 222
    - parasympathetic system, 226-27
    - proteins and amino acids, 223-24
  - pancreatic regulation of, 307-10
  - pathogenic states, 227-35
    - disorders of insulin hypersecretion, 233-34
    - inhibition of insulin release, 227
    - insulin deficiency states, 232-33
    - insulin resistance and antagonism, 228-32
    - pharmacologic agents, 234-35
- Interferon
  - action of, 29-38
    - biological role, 34-35
    - clinical perspectives of, 35-38
      - mechanism of, 33-34
      - spectrum of, 29-33
      - table of, 130-31
  - induction, 17-25
    - cells of origin, 23-24
    - factors influencing, 24-25
    - mechanism of, 21-23
    - as part of immune response, 27-29
    - species specificity, 22, 27
    - by Toxoplasma, 212-14
  - introduction, 17
  - properties of, 25-27
    - biological, 27
    - physicochemical, 25-27
  - in resistance to Toxoplasma, 208, 212-14
- Interferon inducers
  - action of, 29-38
    - clinical perspectives of, 35-38
    - spectrum of, 29-32
    - table of, 30-31
- critical features of, 19-21
- list of, 17
- Intestinal flora
  - elimination of
    - in metabolic deficiency disease treatment, 343
- Intestine
  - pancreatic stimulators in, 307-10
- Iodine 131
  - clastogenesis by, 412, 425-26
- 5-Iododeoxyuridine
  - clastogenesis by, 412, 414
  - topical use of, 61, 64
- Iron absorption, 145-56
  - influence of mucosal and internal factors, 148-51
    - mucosal mechanism for excluding surplus iron, 148-49
    - signal to mucosa, 149-51
  - luminal environment, 145-47
    - absorption of food iron, 147
  - gastrointestinal secretions, 146-47
  - quantitative aspects of iron balance, 151-55
    - disturbances or iron balance, 152-55
    - overload, 153-54
- Irradiated culture media
  - clastogenesis by, 412, 426
- Isocarboxazid
  - antidepressant use of, 371, 373
  - clastogenesis by, 412, 415-16
- Isomaltase
  - deficiency of, 336
- Isopropylmethylsulfonate
  - clastogenesis by, 412, 420
- Isotopes
  - clastogenesis by, 412, 425-26
- Isovaleric acidemia
  - dietary treatment of, 344
- Itch
  - chemical causes of, 67-68
    - histamine, 67-68
    - histamine liberators, 68
    - Mucuna pruriens, 68
    - proteolytic enzymes, 68
  - pathological, 68-69
  - obstructive jaundice, 68-69

- skin diseases, 68
- J
- Jaundice, obstructive  
itch of, 68-69
- Jejunum  
iron absorption from,  
146
- Joints  
crystal-induced inflamma-  
tion of, 357-66  
canine model, 361
- Juxtaglomerular cells  
and renin release, 80, 82-  
84, 86, 92-95
- K
- Kallidin  
in inflammatory response,  
112  
sodium diuresis by, 93
- Kallikrein  
and inflammation, 109, 112-  
13  
on itch, 68
- Kanamycin  
interferon induction by,  
18
- Keratoses  
topical treatment of, 59-  
62
- Keto-acidosis  
dietary treatment of,  
344
- Ketone bodies  
on insulin secretion, 224-  
25
- 11-Ketopregnanolone  
and inflammation, 108
- Kidney  
anatomy of, 82-83  
chronic failure of  
water clearance problems,  
260  
and edema  
experimental, 270-73  
human, 274-78  
glomerular filtration rate  
(GFR)  
in edema, 276  
mechanism of regulation  
of, 81, 94-95  
role of in sodium excre-  
tion, 75-76  
on water diuresis, 260,  
265  
immunologic aspects of  
disease of, 1-16  
antibodies against glomeru-  
lar basement membrane,  
2-4  
concluding comments, 13-  
14  
introduction to, 1-2  
mediators of inflammation,
- 9-13  
nonglomerular antigen-  
antibody complexes, 4-  
8  
pathogenesis, 2-9  
in impaired water excretion  
syndromes, 259-68  
loop of Henle  
water impermeability of,  
77  
nephrotic syndrome  
ADH secretion in, 263  
regulation of sodium excre-  
tion by, 75-98  
aldosterone effects, 76-  
78  
control of aldosterone se-  
cretion, 78-80  
exclusive of aldosterone  
or GFR, 87-95  
hormonal theories, 91-  
92  
intrarenal mechanism of  
92-95  
regulation of renin release,  
80-87  
theories to explain, 90-  
91  
sodium-reabsorption factor  
in, 77  
transplant  
immunologic aspects of,  
9, 13  
and susceptibility to toxo-  
plasmosis, 209  
transplant rejection  
microangiopathic hemolytic  
anemia with, 141
- Kinetin riboside  
on interferon induction,  
28
- Kinins  
in inflammation, 109, 112-  
13  
in pain production, 70  
as vasodilatation mediators,  
361-62
- L
- Lactase  
deficiency of, 335-36
- Lactate dehydrogenase-eleva-  
ting virus  
interferon induction by,  
19
- Lactoferrin  
isolation of, 284-85  
synthesis sites of, 290
- Lead  
clastogenesis by, 412,  
423
- Leishmania donovani  
interferon induction in,  
29, 31
- Lesch-Nyhan syndrome  
see under Syndromes
- Leukemia  
and Mycoplasma, 184  
and susceptibility to toxo-  
plasmosis, 209
- Leukemia, acute  
inflammatory response of,  
123
- Leukemia, acute lymphoblastic  
L-asparaginase in, 434,  
437-39, 442  
chromosomal changes in,  
388-91
- Leukemia, acute myeloblastic  
chromosomal abnormalities  
in, 386, 389-91
- Leukemia, acute myelocytic  
L-asparaginase in,  
437
- Leukemia, aleukemic  
missing Y chromosome in,  
383
- Leukemia, chronic granulocytic  
L-asparaginase in, 438
- Leukemia, chronic lymphocytic  
chromosomal changes in,  
392
- Leukemia, chronic myelocytic  
chromosomal changes in,  
379-86  
blastic phase of chronic  
myelocytic leukemia,  
384-85
- Ph<sup>1</sup>-chromosome, 380-  
81
- Ph<sup>1</sup> in conditions other  
than chronic myelocytic,  
386
- Ph<sup>1</sup> and leukocyte alkaline  
phosphatase, 385
- Ph<sup>1</sup>-negative chronic myel-  
ocytic, 381-82
- Ph<sup>1</sup>-positive chronic myel-  
ocytic, 381
- Ph<sup>1</sup>-positive chronic myel-  
ocytic with other cytogen-  
etic abnormalities, 383
- Ph<sup>1</sup>-positive with missing  
Y chromosome, 382-83
- Ph<sup>1</sup> and radiation, 385
- two or more Ph<sup>1</sup> chromo-  
somes in chronic myel-  
ocytic, 383
- Leukemia, monocytic  
L-asparaginase in, 437
- Leukemia, myeloblastic  
interferon induction in, 19,  
23
- Leukemia, myelomonocytic  
L-asparaginase in, 437
- Leukocytes  
adherence mechanisms  
postulated, 110-11,  
120  
alkaline phosphatase of  
and Philadelphia chromo-  
some, 385  
in Gaucher's disease, 319

- in inflammation, 105-32  
interferon induction in, 23-24, 28  
lactoferrin synthesis in, 290  
polymorphonuclear  
  crystal phagocytosis by, 357-58, 361-64  
  in renal disease, 5, 10-13  
polymorphonuclear neutrophilic  
  in inflammation, 105-25  
Leukopenia  
  on inflammatory response, 122-25  
Leukoplakia  
  topical treatment of, 62  
Leukosarcoma  
  chromosomal changes in, 398-99  
Lichen planus  
  itch of, 68  
Lidocaine  
  antiarrhythmic use of, 50-52  
Lipids  
  cerebral lipidoses, 317-34  
  abeta-Lipoproteinemia  
    dietary treatment of, 344  
Listeria  
  adoptive cellular immunity to, 208-9  
Listeria monocytogenes  
  inflammatory response to, 107  
  interferon induction by, 18, 29-30  
  Toxoplasma-induced resistance to, 208, 214  
Lithium carbonate  
  in depression and mania treatment, 372, 374  
Lithocholic acid  
  and inflammation, 108  
Liver  
  cirrhosis of  
    see Cirrhosis  
  effect of L-asparaginase on, 439  
  interferon induction in, 24, 35  
  transplant rejection  
    microangiopathic hemolytic anemia with, 141  
Lues  
  renal disease following, 8  
Lung  
  chronic disease of  
    in cystic fibrosis, 99-100  
  diseases of  
    and ADH abnormalities, 263-64  
  gamma-immunoglobulins in, 193  
  interferon induction in, 24  
Lupus erythematosus  
  DNA-antibody complexes in, 6  
  and renal disease, 10, 13  
Lymph node permeability factor  
  in inflammation, 119  
Lymph nodes  
  distribution of gamma-E-forming cells in, 193-94  
Lymphocytes  
  in inflammation, 105, 116  
  interferon induction in, 23-24, 27-28  
Lymphocytic choriomeningitis virus  
  and kidney infection, 8  
Lymphomas  
  chromosomal abnormalities in, 398-99  
  and susceptibility to toxoplasmosis, 209  
Lymphoreticular system  
  interferon induction in, 24, 27  
Lymphosarcoma  
  ADH problems in, 263  
  L-asparaginase in, 438  
  chromosomal changes in, 398  
Lysergic acid diethylamide (LSD)  
  clastogenesis by, 412, 415-18  
Lysosomes  
  and inflammatory response, 121-22  
  in lipidoses, 317  
  membrane labilization or degranulation  
    agents causing, 121
- M
- Macrophages  
  in inflammation, 105  
  in resistance, 208  
Macula densa cells  
  and renin release, 80-82, 87  
Magnesium  
  deficiency  
    clastogenesis from, 412, 423  
  in immunology of renal disease, 12  
Malaria  
  renal disease following, 8  
Maleic anhydride/divinyl  
  ether copolymer  
  interferon induction by, 18, 20, 25  
Maleic hydrazide  
  clastogenesis from, 412, 418-19  
Maleopimaric acid  
  on complement formation, 13  
Malignancy  
  toxoplasmosis complicating, 209-10, 212  
Maltase  
  deficiency of, 335  
Mammary glands  
  immunoglobulins in, 289-90, 294  
Mannoheptulose  
  on insulin secretion, 223  
Mannose  
  on insulin secretion, 223  
Maple syrup urine disease  
  see under Diseases  
Mast cells  
  drug effects on, 105  
  in inflammation, 105, 113-15  
  structure and function of, 113  
Meat  
  uncooked  
    and toxoplasmosis transmission, 201  
Meclorethamine HCl  
  see Nitrogen mustard  
Mecizline  
  clastogenesis by, 411, 415-16  
Melanoma  
  L-asparaginase in, 438  
Melittin  
  pain produced by, 72  
Mengo virus  
  on interferon induction, 29-30, 35  
  Toxoplasma-induced resistance to, 208, 214  
Meningitis  
  ADH problems in, 263  
Menstrual cycle  
  immunoglobulins in, 283  
  and iron balance, 151-53  
Mental retardation  
  from inborn metabolic errors, 336-52  
Meprobamate  
  clastogenesis by, 412, 415-16  
  in depression, 372  
beta-Mercaptoethanol  
  clastogenesis by, 411, 422  
6-Mercaptopurine  
  clastogenesis by, 412, 414  
  and susceptibility to toxoplasmosis, 210

- $\beta$ -Mercaptopyruvate  
 clastogenesis by, 411,  
 424  
 5-Mercaptouracil  
 topical use of, 61  
 Mescaline  
 clastogenesis from, 412,  
 415-16  
 Metabolism, inborn errors of  
 addition of product or its  
 derivatives, 344-46  
 glycogen diseases, 344-  
 45  
 orotic aciduria, 345-  
 46  
 conclusion, 350-52  
 dietary treatment of, 335-  
 56  
 evaluation criteria, 351  
 provision of cofactor, 346-  
 47  
 methylmalonic acidemia,  
 346  
 other, 347  
 thiamine dependency, 346-  
 47  
 reduction of excessive en-  
 zyme activity, 347-49  
 hyperuricemia, 348-  
 49  
 prophyria, 347-48  
 reduction of substrate or its  
 precursors, 335-44  
 disaccharidase deficiency,  
 335-37  
 disorders with elevated  
 blood ammonia, 342-  
 44  
 fructosemia, 338  
 galactosemia, 337-38  
 hereditary ataxic polyneu-  
 ritis, 338-39  
 homocystinuria, 341-  
 42  
 other disorders, 344  
 phenylketonuria, 339-41  
 transport defects, 349-50  
 glucose, galactose malab-  
 sorption, 349  
 Hartnup's disease, 349-  
 50  
 other, 350  
 Metachromatic leukodystrophy  
 biochemical lesion in, 322-  
 23  
 diagnosis of, 323  
 enzymatic defect in, 325  
 signs and symptoms,  
 322  
 treatment of, 323-24  
 Metacresol  
 clastogenesis from, 412,  
 422  
 Metacresol purple  
 clastogenesis from, 412,  
 422  
 Metanitrophenol  
 clastogenesis from, 412,  
 422  
 Methacholine  
 on insulin release, 227  
 Methanol  
 clastogenesis from, 412,  
 422  
 Methemoglobin  
 and oxygen affinity, 190  
 Methenamine mandelate  
 clastogenesis by, 412, 414-  
 15  
 Methionine  
 in homocystinuria, 341-  
 42  
 transport defect, 350  
 Methotrexate  
 with L-asparaginase, 438  
 clastogenesis by, 411-12,  
 422  
 topical use of, 61-62,  
 65  
 Methoxychloroacridine  
 clastogenesis from, 412,  
 420  
 Methyl acetate  
 clastogenesis from, 412,  
 422  
 Methylated albumin  
 on interferon induction,  
 25  
 6-Methylcoumarin  
 clastogenesis from, 421,  
 424  
 Methylene blue  
 clastogenesis from, 412,  
 421  
 Methylmalonic acidemia  
 description and treatment  
 of, 346  
 Methyl methane sulfonate  
 clastogenesis from, 412,  
 419-20  
 Methylnitronitrosoguanidine  
 clastogenesis from, 412,  
 419-20  
 Methylnitrosoguanidine  
 clastogenesis from, 412,  
 420  
 N-Methylphenylnitrosamine  
 clastogenesis by, 412,  
 420  
 Methylurethane  
 clastogenesis by, 412,  
 420  
 Microangiopathic hemolytic  
 anemia  
 see Anemia  
 Microbial extracts  
 interferon induction by,  
 18  
 Micropuncture  
 renal, 75  
 Milk  
 breast  
 immunoglobulins in, 282,  
 284-85  
 inclusion in aid programs  
 controversy over, 336  
 Mitomycin C  
 clastogenic action of, 410,  
 412, 414-15  
 Molluscum contagiosum virus  
 interferon induction by,  
 19  
 Moloney sarcoma virus  
 on interferon induction,  
 31-32  
 Monoamine oxidase inhibitors  
 in depression, 370-73,  
 375-76  
 Mononucleosis  
 interferon induction in,  
 19  
 Monosodium glutamate (MSG)  
 clastogenesis by, 409, 412,  
 416-17  
 Monosodium urate monohydrate  
 in gout, 358  
 Morphine  
 effect of, on ADH release,  
 262-63  
 Mucosal endocrine cells  
 gastrointestinal  
 types of, 312  
 Mucous membranes  
 bronchial  
 immunoglobulins in, 282,  
 284  
 gastric  
 immunoglobulins in, 282  
 intestinal  
 disaccharidase deficiency  
 in, 335-37  
 immunoglobulins in,  
 282  
 nasal  
 immunoglobulins in, 282,  
 284, 294  
 Mucinain  
 itch production by, 68  
 Mucuna pruriens  
 itch production by, 68  
 Multiple myeloma  
 chromosomal abnormalities  
 in, 399-400  
 and susceptibility to toxo-  
 plasmosis, 209  
 Mumps virus  
 interferon induction by, 19,  
 35  
 Murine leukemia virus  
 and kidney disease, 7-  
 8  
 Mycoplasma gallisepticum  
 characterization of, 183  
 Mycoplasma hominis  
 in genitourinary disorders,  
 184  
 Mycoplasma mycoides  
 characterization of, 182  
 Mycoplasma neurolyticum  
 characterization of, 182-  
 83

- Mycoplasma pneumoniae*  
adherence property of, 184  
history of, 179-81  
*Mycoplasmas*, 179-86  
history of, 179-81  
human infection by, 184-85  
pathogenic properties of, 182-84  
problems in recovery from tissue, 181-82  
*Mycoplasma synoviae*  
growth requirements of, 181  
*Mycosis fungoides*  
topical treatment of, 63  
Myeloid metaplasia  
and susceptibility to toxoplasmosis, 209  
with or without myelofibrosis  
chromosomal abnormalities in, 394  
Myeloma  
 $\gamma$ E, 190-92, 195, 199  
scheme of protein of, 192  
see also Multiple myeloma  
Myeloproliferative disorders  
chromosomal changes in, 392-94  
Myocardial infarction  
treatment of arrhythmias of, 47-58  
Myonecrosis  
pain of, 71  
Myringitis  
Mycoplasma in, 184  
Myxedema  
ADH problems in, 263  
Myxoviruses  
as interferon inducers, 18
- N**
- Nalidixic acid  
clastogenesis by, 412, 414-15  
Naphthalene  
clastogenesis by, 412, 422  
Natriuresis  
see Kidney, regulation of sodium excretion in  
Neomycin  
on interferon induction, 25  
Neoplasia  
L-asparaginase in, 433-44  
chromosomal changes in, 379-408  
acute leukemia, 388-90  
Bloom's syndrome, 395  
chronic lymphocytic leukemia, 392  
chronic myelocytic leukemia, 379-86  
distribution of modal chromosome number in acute leukemia, 389  
Down's syndrome, 395-96  
Fanconi's syndrome, 394-95  
general comments on acute leukemia, 390-91  
introduction to, 379  
lymphomas, 398-99  
myeloproliferative disorders, 392-94  
paraproteinemias, 399-400  
Philadelphia chromosome and origin of marrow cells, 387-88  
solid tumors and metastases, 396-98  
Nephritis  
experimental nephrotoxic complement in, 119  
immunologic aspects of, 1, 4, 6, 8-9, 13-14  
autologous immune complex, 6  
transplant, 9  
unclassified human nephritides, 9  
Nephrosis  
edema of, 276-77  
Nerve, vagus  
in pancreatic secretion, 304-6, 310  
and renin release, 85-86  
Neurotic depression  
description of, 370  
Neutral red  
clastogenesis by, 412, 421  
Neutropenia, congenital  
inflammatory response in, 123  
Newcastle disease virus  
on interferon induction, 21, 26-27, 29-30  
Nialamide  
clastogenesis by, 412, 415-16  
Nicotinic acid  
deficiency in Hartnup's disease, 349  
Niemann-Pick disease  
see under Diseases  
Nitric oxide  
clastogenesis by, 412, 418  
Nitrogen mustards  
clastogenesis by, 412, 418, 420  
topical use of, 61, 63-64  
4- and 6-Nitrometacresol  
clastogenesis by, 412, 422  
4-Nitroquinoline-N-oxide  
on interferon induction, 25  
Nitrosomethylurethane  
clastogenesis by, 412, 420  
Nitrous acid  
clastogenesis by, 412, 416-17  
Norepinephrine  
in depression, 375  
and edema, 274  
and inflammation, 113  
on insulin secretion, 226  
on interferon induction, 24  
on prostaglandin release, 77  
Nortriptyline  
antidepressant use of, 370-71  
Nucleic acids  
as interferon inducers, 17-18  
see also specific ones  
Nutrition  
dietary treatment of inborn metabolic errors, 335-56  
Nystatin  
and inflammation, 106
- O**
- Obesity  
definition of, 241-42  
endocrine aspects of, 241-58  
cortisol metabolism, 252  
hormonal changes, 242-43  
human growth hormone metabolism, 251-52  
insulin, 243-51  
introduction to, 241-42  
metabolic fuels in obesity, 253-56  
summary of, 256-57  
inheritance of, 253  
and insulin metabolism, 243-51  
basal hyperinsulinism, 248-51  
factors underlying insulin resistance, 244-45  
genesis of peripheral insulin resistance, 246-48  
hyperinsulinism, 243-44  
insulin turnover, 245  
peripheral subresponsiveness, 245-46  
and insulin secretion, 220, 222, 228-29

- Vermont study of, 242-43  
Organ transplant  
in Gaucher's disease,  
322  
Ornithine transcarbamylase  
deficiency of, 343  
Orotic aciduria  
description and treatment  
of, 345-46  
Orthocresol  
clastogenesis by, 413,  
422  
Orthocresolphalein  
clastogenesis by, 413, 422  
Orthonitrophenol  
clastogenesis by, 413,  
422  
Osmotic diuresis  
description of, 260  
Ovarian tube  
immunoglobulins in, 283,  
290  
Oxalates  
on iron absorption, 146  
Oxygen  
in blood  
and iron absorption, 149  
hemoglobins with decreased  
affinity for, 160  
hemoglobins with raised  
affinity for, 157-60  
Oxytocin  
on water excretion, 259  
ADH interference, 263  
Ozone  
clastogenesis by, 417-  
18
- P**
- Pacemakers, cardiac  
in treatment of tachyarrhyth-  
mias, 54  
Pain  
on ADH release, 262  
chemical causes of, 69-  
70  
pathological, 70-72  
acute gouty arthritis, 70-  
71  
myonecrosis, 71  
venoms, 71-72  
Pancreas  
adenocarcinoma of  
ADH problems in, 263  
effect of L-asparaginase on,  
440  
insufficiency  
in cystic fibrosis, 99-  
101  
regulation of secretions of,  
299-316  
anatomical components of,  
311-13  
chemistry and pharmacology  
of hormones effecting,  
300-2  
conclusions, 314  
disorders in, 313-14  
endocrine, 307-10  
exocrine, in response to  
food, 304-7  
introduction to, 299-  
300  
methods of investigating  
exocrine secretions,  
302-4  
mode of actions of agents  
in vitro, 310-11  
role in iron absorption,  
147  
Pancreatitis  
with insulin deficiency,  
232  
Pancreozymin  
on insulin secretion, 225-  
26  
pancreatic stimulation by,  
299, 310  
Pancreozymin-cholecystokinin  
(PZ-CCK)  
cross-reaction with gastrin,  
303-4  
stimulation of pancreas by,  
299, 301-3, 305-6, 308-  
13  
Papain  
itch production by, 68  
Papovaviruses  
as interferon inducers,  
18  
Paracresol  
clastogenesis by, 413, 422  
Parafluorophenylalanine  
clastogenesis by, 413,  
421  
Parainfluenza  
secretory antibodies against,  
293  
Paranitrophenol  
clastogenesis by, 413,  
422  
Paraproteinemias  
chromosomal changes in,  
399-400  
Parasite infestation  
and immunoglobulin E levels,  
192  
Parasympathetic nervous sys-  
tem  
on insulin secretion, 226-  
27  
and pancreatic secretions,  
306, 311  
D-Penicillamine  
allergic reactions to  
renal disease following,  
8  
Penicillin  
clastogenesis by, 413,  
415  
 $\gamma$ E-antibodies against, 168  
Penicillium spp.  
interferon induction by,  
18-19  
Peptic ulcer  
and cystic fibrosis, 101  
Peptone  
and inflammation, 108  
Perchloroethylene  
clastogenesis by, 413,  
422  
Perphenazine  
antidepressant use of, 371  
Phagocytosis  
of gout crystals, 357-58  
Pharmacology  
agents causing chromosomal  
damage, 409-32  
Pharyngitis  
Mycoplasma in, 179  
Phaseolus vulgaris  
interferon induction by,  
18  
Phenelzine  
antidepressant use of, 370  
Phenol  
clastogenesis by, 413,  
422  
Phenothiazines  
antidepressant use of, 371-  
73  
Phenylalanine  
in phenylketonuria, 339-  
41  
Phenylbutazone  
anti-inflammatory use of,  
359  
in gout, 364  
Phenylketonuria  
description and treatment  
of, 339-41, 352  
maternal PKU, 341  
overtreatment, 340  
termination of diet, 340-  
41  
Phenylurethane  
clastogenesis by, 413,  
420  
Phenylzine  
clastogenesis by, 412-13,  
415-16  
Pheochromocytoma  
insulin problems in, 227  
Philadelphia chromosome  
(Ph1)  
see under Chromosomes  
Phleomycin  
clastogenic action of, 410,  
413-15  
Phosphates  
on iron absorption, 146  
Phospholipase A  
pain produced by, 72  
Phosphomannan  
interferon induction by,  
18  
Phosphorus 32  
clastogenesis by, 412, 425-  
26  
Physalis physalis

- pain from venom of, 72
- Phytanic acid  
clinical disorder in metabolism of, 338-39
- Phytohemagglutinin  
interferon induction by, 18
- Phytolacca americana  
interferon induction by, 18
- Picornaviruses  
as interferon inducers, 18
- Piperazine  
clastogenic action of, 411, 424
- Placenta  
interferon in, 35
- Plant extracts  
interferon induction by, 18
- Plant growth inhibitors  
clastogenesis by, 418
- Plasmin  
in inflammation, 109
- Plasmodium berghei  
interferon induction by, 18, 29-30
- Platelets  
in inflammatory response, 108-9
- Pneumonia  
primary atypical  
Mycoplasma role in, 179-86
- Podophyllin  
clastogenesis by, 413, 420-21  
topical use of, 62
- Podophyllotoxin  
clastogenesis by, 413, 420-21
- Polio  
secretory antibodies against, 293-94
- Pollution  
air and water pollutants  
clastogenesis by, 417-18
- Polyacrylic acid  
interferon induction by, 18, 25
- Polycythemia  
hemoglobins of, 157-59
- Polycythemia vera  
chromosomal abnormalities in, 383, 392-94
- Polymers  
on resistance to Toxoplasma, 214  
synthetic  
interferon induction by, 18
- Polymethacrylic acid  
interferon induction by, 18
- Polyneuritis, hereditary ataxic  
description and treatment of, 338-39
- Polyoma virus  
on interferon induction, 31-32
- Polypeptides  
and inflammatory response, 112-13
- Polyphosphates  
interferon induction by, 18
- Polyribadenylic acid/polyuridylic acid (poly rA:rU)  
interferon induction by, 18, 20
- Polyribinosinic acid/polycytidylic acid (poly rI:rC)  
interferon induction by, 18, 20-22, 25, 29-30, 36-37  
on resistance to Toxoplasma, 214
- Polysulfates  
interferon induction by, 18
- Polythiophosphates  
interferon induction by, 18
- Polyvinylsulfate  
interferon induction by, 18
- Porphyrin  
ADH problems in, 263  
description and treatment of, 347-48
- Potassium  
clastogenesis by, 413, 423  
on heart arrhythmias, 48, 54  
on pain production, 69-70
- Potassium cyanide  
clastogenesis by, 413, 423
- Potassium salts  
on aldosterone synthesis, 79
- Poxviruses  
as interferon inducers, 18
- Prausnitz-Kustner reactions (P-K)  
antibody-mediating, 187, 190
- Prednisone  
in combination chemotherapy, 438
- Pregnancy  
complications of  
and microangiopathic hemolytic anemia, 139-41  
and insulin secretion, 230-31  
iron balance in, 151-53
- Procainamide  
antiarrhythmic use of, 50-51
- Proflavin  
clastogenesis by, 413, 421
- Proinsulin  
as complication of insulin assay, 303  
identification of, 219  
isolation of, 245
- Propanol  
clastogenesis by, 413, 422
- $\beta$ -Propiolactone  
clastogenesis by, 411, 419-20
- Propranolol  
antiarrhythmic use of, 52-53, 55
- Propylene glycol  
as vehicle for 5FU, 60-61
- Prostaglandin E2  
and urinary sodium excretion, 77, 88
- Protamine  
on interferon induction, 25
- Proteases  
pain produced by, 72
- Proteins  
on insulin secretion, 223-24
- Protein synthesis  
L-asparaginase effect on, 435, 439
- Proteolytic enzymes  
and inflammation, 114  
itch production by, 68
- Protozoa  
interferon induction by, 18, 30  
toxoplasmosis, 201-18
- Protryptiline  
antidepressant use of, 370-71
- Pseudogout  
crystals of, 357-58, 360
- Pseudomonas aeruginosa  
inflammatory response to, 107
- Psittacosis  
interferon in, 29-30
- Psoriasis  
chemotherapy of, 422  
topical treatment of, 64-65
- Psoriatic arthritis  
kinin peptide levels in, 361
- Psychiatry  
chemotherapy of mental depression, 367-78
- Purromycin  
clastogenesis by, 413-15
- Purpura fulminans  
with microangiopathic hemolytic anemia, 141
- Pyridoxine



- in homocystinuria, 342  
in porphyria, 348  
Pyronine  
  clastogenesis by, 413,  
  421  
Pyrophosphates  
  clastogenesis by, 413, 423
- Q**
- Quinacrine  
  clastogenesis by, 411,  
  421  
Quinidine  
  antiarrhythmic use of, 49-  
  50
- R**
- Rabies virus  
  and interferon, 29  
Radiation  
  and iron absorption,  
  149  
  and Philadelphia chromo-  
  some, 385  
Radiodermatitis, chronic  
  treatment of, 62  
Radioimmuno-electrophoresis  
  of reagin-rich fraction,  
  188  
Ragweed  
   $\gamma$ E-antibodies against, 188-  
  89, 195-96  
Rat virus  
  interferon induction by,  
  19  
Rauscher leukemia virus  
  on interferon induction, 31-  
  32  
Rectum  
  immunoglobulins in, 282  
Reed-Sternberg cells  
  in lymphomas, 398-99  
Reflexes  
  cardiovascular  
  renal effects of, 85  
Refsun's disease  
  see under Diseases  
Renin  
  in edema, 272-73, 276  
  regulation of release of,  
  80-87, 93-95  
  factors in, 78  
  vascular reflexes, 82-  
  87  
Reoviruses  
  as interferon inducers, 18,  
  21, 29-30  
Reserpine  
  on depression, 375  
Reticulum cell sarcoma  
  abnormal chromosomes in,  
  398-99  
  L-asparaginase in, 438  
  and susceptibility to toxo-  
  plasmosis, 209
- Rhinovirus  
  secretion of antibodies  
  against, 293  
Ribonucleic acid (RNA)  
  L-asparaginase effect on,  
  435  
  interferon induction by, 18-  
  23, 29  
Ribose  
  on insulin secretion, 223  
Rice dwarf virus  
  interferon induction by,  
  18  
Rickets  
  vitamin D-resistant  
  dietary therapy of, 350  
Rickettsiae  
  as interferon inducers,  
  18  
Rivanol  
  clastogenesis by, 413, 421  
Rous sarcoma virus  
  on interferon induction,  
  31-32  
Rubidomycin  
  clastogenesis by, 413,  
  415  
Rye grass  
   $\gamma$ E-antibodies against,  
  188
- S**
- Sabin-Feldman dye test  
  to diagnose toxoplasmosis,  
  203  
Salicylates  
  in inflammation, 105  
Saline, hypertonic  
  inflammatory response to,  
  107  
  pain production by, 69  
Saliva  
  immunoglobulins in, 282-85,  
  288-89, 292  
  interferon in, 35  
Salmonella  
  secretion of antibodies  
  against, 292-93  
Salmonella typhimurium  
  as interferon inducer, 18,  
  30  
  Toxoplasma-induced resist-  
  ance to, 208  
Saponin  
  and inflammation, 106-  
  7  
Sarcoma, reticulum cell  
  see Reticulum cell sarcoma  
Scopolamine  
  clastogenesis by, 413, 415-  
  16  
Scarpie  
  and interferon, 29  
Sea snakes  
  pain production by,  
  71
- Secretin  
  on insulin release, 225  
  in regulation of pancreatic  
  secretion, 299-302, 304-  
  6, 309-10  
  site and mode of action of,  
  310  
  structure of, 301  
Secretory "piece"  
  distribution in tissue,  
  291  
  immunological reactions  
  of, 288  
  isolation of, 284-85  
  properties of, 286-88  
  synthesis site, 289-90  
Secretory system  
  antibodies in  
  biological significance of,  
  292-95  
  chemical characterization  
  of, 283-91  
  morphological aspects of  
  transport of, 291-92  
  of other species, 292  
  quantitation of, 281-83  
  as separate from circula-  
  ting antibodies, 281,  
  294  
  structure and function of,  
  281-98  
  regulation of pancreatic  
  secretions, 299-316  
Semliki Forest virus  
  on interferon induction,  
  29-30  
Sendai virus  
  on interferon induction, 31-  
  32  
Serotonin (5-Hydroxytryptamine)  
  in depression, 375  
  and inflammation, 108, 109-  
  10, 112, 114  
  on interferon induction,  
  24  
  on pain production, 69-71  
Serratia marcescens  
  L-asparaginase from, 434,  
  441  
  as interferon inducer,  
  18  
Serratia spp.  
  inflammatory response,  
  123-24  
Serum  
  immunoglobulins in, 282,  
  288-89, 294  
  urate-binding fraction of,  
  360  
Serum sickness  
  experimental  
  glomerular lesions, 4-6,  
  10  
Shwartzman reaction  
  anticoagulant inhibition of,  
  109  
  to study intravascular

- hemolysis, 134
- Sickle cell disease
  - see under Diseases
- Siderosis
  - cause of, 153-54
- Sindbis virus
  - interferon induction by, 26-27, 35
- Skin
  - inflammation of
    - crystal-induced, 359
    - malignancies of
      - topical antimetabolite treatment of, 59-66
  - skin window
    - to study inflammation, 106-7, 111
- Slow-reacting substance of anaphylaxis
  - $\gamma$ E-immunoglobulin effects on release of, 195-98
- Snake venom
  - pain produced by, 72
  - see also Cobra venom factor
- Sodium
  - absorption in renal tubules and edema, 271-72
  - brain content of
    - in depression, 374, 376
    - in congestive heart failure, 274
  - excretion of
    - and edema, 271-78
    - renal regulation of, 75-98
      - saline load effects on, 87
    - proximal tubule concentration of, 75
    - restriction or depletion on water diuresis, 260
  - Sodium hypochlorite
    - clastogenesis by, 411, 413, 417-18
  - Sodium nitrite
    - clastogenesis by, 413, 416-17
  - Sodium orotate
    - to induce inflammation, 359
  - Sodium urate crystals
    - to study gouty inflammation, 357-66
- Solar keratoses
  - use of topical antimetabolites against, 59-62
- Sonic vibrations
  - clastogenesis by, 413, 425-26
- Sperm
  - malformation of
    - in cystic fibrosis, 101
- Sphingolipidoses
  - enzymatic defects in, 325
- Sphingolipids
  - structures of, 318
- Sphingomyelin
  - in Niemann-Pick disease, 324
  - structure of, 318
- Sphingomyelinase
  - in Niemann-Pick disease, 325-27
- Sphingosine
  - structure of, 318
- Spiramycin
  - topical use of, 61
- Spirolactone
  - on urinary sodium excretion, 77
- Spleen
  - $\gamma$ E-antibodies in, 193
  - interferon induction in, 24, 27
  - transplant
    - in Gaucher's disease, 322
- Splenectomy
  - in Gaucher's disease, 318
  - in hemoglobin abnormalities, 166-67
  - on pathogenesis of toxoplasmosis, 210
- Spongiblastoma, polar and toxoplasmosis, 211
- Sprue, tropical
  - iron absorption in, 153
  - pancreatic secretory disorders in, 313
- Staphylococcus
  - renal disease following, 8
- Staphylococcus albus
  - and inflammation, 115-16, 118
- Staphylococcus aureus
  - inflammatory response to, 107, 123-25
- Staphylococcus toxins
  - on interferon induction, 30
- Starvation, therapeutic
  - gluconeogenesis during, 254-56
- Statolon
  - interferon induction by, 18-19, 31-32
- Steroid hormones
  - in inflammation, 105
- Stevens-Johnson syndrome
  - see under Syndromes
- Stings
  - and pain production, 69
- Stone fish
  - pain from venom of, 72
- Streptococcus
  - as an antigen, 7
  - renal disease following, 7, 11
- Streptococcus pyogenes
  - inflammatory response to, 107
- Streptomyces griseus
  - interferon induction by, 18
- Streptomyces kanamyceticus
  - interferon induction by, 18
- Streptomycin
  - clastogenesis by, 413-15
  - on interferon induction, 25
- Streptonigrin
  - clastogenesis by, 410, 413-15
- Stress
  - on interferon induction, 24
- Stress, emotional
  - on ADH release, 262
- Stress, surgical
  - on ADH release, 263
  - on insulin secretion, 226
- Sucrase
  - deficiency of, 336-37
- Suicides
  - study of monoamines in brains of, 375
- Sulfatide
  - in metachromatic leukodystrophy, 322-23
  - structure of, 318
- Sulfonylureas
  - on insulin secretion, 234-35
  - on water excretion, 260, 263
- Surgery
  - cardiac
    - as treatment of myocardial infarction, 55
    - and insulin secretion, 226-27
- SV-40 virus
  - on interferon induction, 31-32
- Sweat test
  - to diagnose cystic fibrosis
    - adult unreliability of, 101-3
- Sympathomimetics
  - insulin problems from, 227
- Synanceja horrida
  - pain from venom of, 72
- Syndromes
  - autoimmune
    - Mycoplasma implication in, 185
  - Bloom's
    - chromosomal changes in, 395
  - Chediak-Higashi
    - inflammatory response in, 124
  - congenital total lipodystrophy
    - insulin secretion in, 232
  - Cushing's
    - cortisol levels compared

- with obesity, 252  
 Di Guglielmo's  
 chromosomal changes in,  
 390  
 Down's  
 chromosomal changes in,  
 394-95  
 Fanconi's  
 chromosomal changes in,  
 394-95  
 Goodpasture's  
 immunological aspects of,  
 3  
 Guillain-Barre  
 ADH problems in, 263  
 Mycoplasma in, 184  
 hemolytic uremic, 137-38  
 hypo-osmolar  
 secondary to impaired  
 water excretion, 259-68  
 Lesch-Nyhan  
 dietary treatment of, 348-49  
 nephrotic  
 ADH secretion in, 263  
 of pancreatic secretory disorders, 313-14  
 sickle cell  
 hemoglobins of, 158, 171-72  
 Stevens-Johnson  
 Mycoplasma in, 179, 184  
 water intoxication, 267  
 Zollinger-Ellison  
 cell types in, 312  
 Synovial fluid  
 crystal-induced inflammation  
 in, 357-66
- T
- Tay-Sachs disease  
 see under Diseases  
 Tay-Sachs ganglioside  
 pathological aspects of,  
 330  
 structure of, 318  
 T component  
 see Secretory "piece"  
 Temperature shock  
 clastogenesis from, 413,  
 425-26  
 Tetracycline  
 clastogenesis from, 413-15  
 Tetrahydrocannabinol  
 clastogenesis from, 413,  
 415-16  
 Tetramethylenedimethane  
 sulfonate  
 clastogenesis by, 413,  
 420  
 Tetramethyl uric acid  
 clastogenesis by, 413-14  
 Thalassemia  
 review of, 157  
 Thalassemia major  
 iron overload in, 155  
 and parasitemia, 202  
 Thalidomide  
 clastogenesis by, 413, 415-16  
 Theobromine  
 clastogenesis by, 413-14,  
 416-17  
 Theophylline  
 clastogenesis by, 413-14,  
 416-17  
 Thermal injury  
 inflammatory response to,  
 106, 122  
 Thiamine  
 dependency, 346-47  
 Thiazides  
 on water excretion, 260  
 Thioguanine  
 with L-asparaginase,  
 438  
 clastogenesis by, 413-14  
 Thioridazine  
 antidepressant use of, 371,  
 373  
 Thorium dioxide (Thorotrast)  
 clastogenesis by, 413, 425-26  
 on interferon induction,  
 28  
 Thrombocythemia  
 chromosomal changes in,  
 394  
 Thrombosis  
 cerebral vascular  
 ADH problems with, 263  
 Thrombotic thrombocytopenic  
 purpura  
 microangiopathic hemolytic  
 anemia of, 133, 140-41  
 Thymidine  
 clastogenesis by, 413-14  
 Thymine deoxyriboside  
 clastogenesis by, 413-14  
 Thyroiditis  
 nephritis with, 6  
 Thyrotoxicosis  
 insulin problems with,  
 227  
 D- $\alpha$ -Tocopherol  
 and inflammation, 106  
 Tolbutamide  
 on ADH release, 263  
 on insulin secretion, 233-34  
 tolerance test  
 in obesity, 249-50  
 Toluene  
 clastogenesis by, 413,  
 422  
 Toluidine blue  
 clastogenesis by, 413, 421  
 Tonsils  
 $\gamma$ E-immunoglobulin in,  
 193-94  
 Toxocara cati  
 transmission of, 202  
 Toxoplasma gondii  
 interferon induction by, 18,  
 29-30  
 transmission of, 201  
 Toxoplasma-hostile factor  
 identification and character-  
 ization of, 207  
 Toxoplasmosis, 201-18  
 diagnosis, 203-6  
 immunity, 206-9  
 interferon and interferon  
 inducers, 212-14  
 organism, 211-12  
 Toxoplasma and brain tumors,  
 210-11  
 Toxoplasma in compromised  
 host, 209-10  
 transmission, 201-2  
 Trachoma  
 as interferon inducer, 18,  
 29-30  
 Transferrin  
 in iron absorption, 145,  
 150, 154  
 Transport "piece"  
 see Secretory "piece"  
 Tranlycypromine  
 antidepressant use of,  
 370  
 Trauma  
 and insulin secretion, 227  
 Trenimon  
 see 2, 3, 5-Tri-ethylene-  
 imino-1, 4-benzoquinone  
 Tretamine  
 clastogenesis by, 413,  
 419  
 Trichloroethane  
 clastogenesis by, 413, 422  
 Tricyclic antidepressants  
 list of, 370  
 2, 3, 5-Tri-ethylene-imino-1,  
 4-benzoquinone (Trenimon)  
 clastogenesis by, 413,  
 421  
 topical use of, 62-63  
 Triethylenemelamine  
 clastogenesis by, 413, 418-19  
 on interferon induction,  
 25  
 Triethylenephosphoramidate  
 clastogenesis by, 413,  
 419  
 Triethylenethiophosphoramidate  
 clastogenesis by, 413,  
 419  
 Triethyleniminotriazine  
 clastogenesis by, 413,  
 420  
 Trifluorothymidine  
 clastogenesis by, 413-14  
 Triglyceride  
 on insulin secretion, 225

- Trimethobenzamide  
clastogenesis by, 413, 415-18
- Trimethylenephosphoramidate  
clastogenesis by, 413, 419
- Trypan blue  
clastogenesis by, 413, 421
- Trypanosoma cruzi  
interferon induction by, 18
- Trypsin  
and inflammation, 108  
and itch production, 68
- Trypsinogen  
deficiency of, 344
- Tryptophan  
intestinal absorption of, 350
- Tuberculosis  
ADH problems in, 263
- Tularemia  
secretion of antibodies against, 293
- Tumors  
antidiuretic material in, 261-66  
and interferon induction, 31, 36  
metastatic  
chromosomal changes in, 396-98
- Turpentine  
inflammatory response to, 108
- Tyrosinemia  
dietary treatment of, 344
- U
- Ulcers, peptic  
secretory aspects of, 313
- Ultraviolet irradiation  
clastogenesis by, 413, 424, 426  
inflammatory response to, 108
- Urate crystals  
absorption of complement by, 362  
in pain production, 70  
pathogenesis of inflammation induced by, 360-62  
phlogistic properties of, 358-59
- Urea  
in blood  
enzyme problems in, 343
- Uremia  
and insulin secretion, 229-30
- Urethane  
clastogenesis by, 412, 418, 420  
on interferon induction, 24
- Urethritis  
and Mycoplasma, 179, 184
- Uric acid  
on leukocyte motility, 363-64
- Uridine-5-phosphate  
failure to synthesize, 345-46
- Urine  
countercurrent-concentrating mechanisms, 77  
factors altering dilution of, 260  
in hypo-osmolar syndromes, 259  
immunoglobulins in, 284  
interferon in, 35  
sodium excretion in, 75-98
- Urticaria  
itch of, 68
- V
- Vaccinia virus  
on interferon induction, 29-30
- Varicella  
nephritis following, 7
- Vasodilation  
and renin release, 83
- Vasopressin (ADH)  
and urinary sodium excretion, 77  
see also Antidiuretic hormone
- Venoms  
Malayan pit viper  
to study hemolysis, 135  
and pain production, 69, 71-72  
see also Cobra venom factor; Snake venom
- Vesicular stomatitis virus  
interferon induction by, 19, 29-30
- Vespa spp.  
venoms of  
pain from, 71
- Vinblastine  
in gout, 364  
leukopenia from, 361
- Vincristine  
with L-asparaginase, 438
- Viruses  
as antigens, 7-8  
in hemolytic-uremic syndrome, 138  
as interferon inducers, 17-19, 30-31  
see also specific ones
- Vitamin A  
and inflammation, 106
- Vitamin B<sub>12</sub>  
in methylmalonic acidemia, 346  
selective familial malabsorption syndrome, 350
- W
- Waldenström's macroglobulinemia  
chromosomal changes in, 399-400
- Warts  
topical treatment of, 64
- Wasp  
allogens in venom of, 71
- Water  
impaired excretion of, 259-68  
appropriate and inappropriate release of ADH, 261-66  
conversion from salt-wasting to salt-retaining state during disease, 266  
and glucocorticoids, 266-67  
introduction to, 259-60  
physiological and pathological factors in, 260
- Weightlessness  
clastogenesis by, 413, 425-26
- Weight reduction  
hormonal effects of, 253  
and insulin secretion, 228-29  
see also Obesity
- Wilm's tumor  
insulin problems with, 227
- X
- Xanthine oxidase  
and iron absorption, 147
- Xeroderma pigmentosum  
topical treatment of, 60, 62
- X ray  
clastogenesis by, 413, 424, 426  
on interferon induction, 24, 28
- Xylene  
and inflammation, 109
- Xylitol

# SUBJECT INDEX

495

effect  
on insulin secretion,  
223  
Xylol  
inflammatory response to,  
108

## Z

Zirconium  
inflammatory response to,  
107  
Zollinger-Ellison syndrome

see under Syndromes  
Zymogens  
stimulation of, 310  
Zymosan  
on interferon induction,  
28



# ANNUAL REVIEW OF MEDICINE

## ANNUAL REVIEW OF MEDICINE



EDITORIAL COMMITTEE

B. Childs  
*Johns Hopkins University*  
A. C. DeGraff  
*New York University*  
N. Freinkel  
*Northwestern University*  
S. S. Kety  
*Harvard Medical School*  
R. Menguy  
*The University of Chicago*  
J. P. Sanford  
*The University of Texas*  
C. A. Stetson, Jr.  
*New York University*

Responsible for organization of Volume 21  
(Editorial Committee, 1968)

B. Childs  
*Johns Hopkins University*  
A. C. DeGraff  
*New York University*  
R. H. Egdahl  
*Boston University*  
R. L. Landau  
*The University of Chicago*  
C. A. Stetson, Jr.  
*New York University*  
G. H. Stollerman  
*The University of Tennessee*

# ANNUAL REVIEW OF MEDICINE

ARTHUR C. DEGRAFF, *Editor*  
*New York University School of Medicine*

WILLIAM P. CREGER, *Associate Editor*  
*Stanford University School of Medicine*

VOLUME 21

1970

ANNUAL REVIEWS, INC.  
4139 El Camino Way  
PALO ALTO, CALIFORNIA 94306

Medical  
G10.5  
A615  
R463  
v. 21

ANNUAL REVIEWS, INC.  
PALO ALTO, CALIFORNIA, U.S.A.

© 1970 BY ANNUAL REVIEWS, INC.  
ALL RIGHTS RESERVED

*Standard Book Number 8243-0521-3*  
*Library of Congress Catalog Card Number: A51-1659*

FOREIGN AGENCY  
Maruzen Company, Limited  
6, Tori-Nichome Nihonbashi  
Tokyo

PRINTED AND BOUND IN THE UNITED STATES OF AMERICA  
BY GEORGE BANTA COMPANY, INC.

## **PREFACE**

As in previous volumes, the Editorial Committee has selected topics for review in areas of medicine where significant advances have been made in the past few years, or where reappraisal with a fresh point of view is desired. It is impossible to review the literature in all branches of medicine each year in a single volume. This was realized many years ago when the present policy was originally adopted. The favorable response from our readers and reviewers has attested to the wisdom of this choice. We are again fortunate that those invited to write the reviews have done a thorough and competent job.

We are thankful that our Assistant Editor, Miss Beryl V. Daniel, has continued to check the manuscripts and galley proofs so well that little work is left for the Editor and Associate Editor. Also, we are happy to have the George Banta Company as our printers, assuring us of the usual excellent printing job.

THE EDITORIAL COMMITTEE

# REPORT

The following report was prepared by the committee on the subject of the proposed amendment to the constitution of the State of New York, and is submitted to the Legislature for its consideration.

The committee has the honor to acknowledge the assistance of the following gentlemen in the preparation of this report: Mr. J. B. Smith, Mr. J. C. Jones, Mr. J. D. Brown, Mr. J. E. White, Mr. J. F. Green, Mr. J. G. Black, Mr. J. H. Gray, Mr. J. I. Gold, Mr. J. K. Silver, Mr. J. L. Copper, Mr. J. M. Iron, Mr. J. N. Lead, Mr. J. O. Tin, Mr. J. P. Zinc, Mr. J. Q. Nickel, Mr. J. R. Cobalt, Mr. J. S. Nickel, Mr. J. T. Zinc, Mr. J. U. Tin, Mr. J. V. Zinc, Mr. J. W. Tin, Mr. J. X. Zinc, Mr. J. Y. Tin, Mr. J. Z. Zinc.

The committee has the honor to acknowledge the assistance of the following gentlemen in the preparation of this report: Mr. J. B. Smith, Mr. J. C. Jones, Mr. J. D. Brown, Mr. J. E. White, Mr. J. F. Green, Mr. J. G. Black, Mr. J. H. Gray, Mr. J. I. Gold, Mr. J. K. Silver, Mr. J. L. Copper, Mr. J. M. Iron, Mr. J. N. Lead, Mr. J. O. Tin, Mr. J. P. Zinc, Mr. J. Q. Nickel, Mr. J. R. Cobalt, Mr. J. S. Nickel, Mr. J. T. Zinc, Mr. J. U. Tin, Mr. J. V. Zinc, Mr. J. W. Tin, Mr. J. X. Zinc, Mr. J. Y. Tin, Mr. J. Z. Zinc.

## CONTENTS

IMMUNOLOGIC ASPECTS OF RENAL DISEASE, <i>Charles Bernard Carpenter</i>	1
— CURRENT CONCEPTS OF INTERFERON AND INTERFERON INDUCTION, <i>Erik De Clercq and Thomas C. Merigan</i>	17
TREATMENT OF VENTRICULAR EXTRASYSTOLES AND TACHYARRHYTH- MIAS IN ACUTE MYOCARDIAL INFARCTION, <i>Arthur Selzer and</i> <i>Keith E. Cohn</i>	47
— TOPICAL ANTIMETABOLITES, <i>Herschel S. Zackheim and Eugene M.</i> <i>Farber</i>	59
— CHEMICAL CAUSES OF PAIN AND ITCH, <i>C. A. Keele</i>	67
RENAL REGULATION OF SODIUM EXCRETION, <i>Ivor H. Mills</i>	75
CYSTIC FIBROSIS IN ADULTS, <i>Saul W. Brusilow</i>	99
LEUKOCYTIC MECHANISMS IN INFLAMMATION, <i>Evan M. Hersh and</i> <i>Gerald P. Bodey</i>	105
MICROANGIOPATHIC HEMOLYTIC ANEMIA, <i>Michael C. Brain</i>	133
ABSORPTION OF IRON, <i>Thomas H. Bothwell and Robert W. Charlton</i>	145
DISEASES DUE TO ABNORMALITIES OF HEMOGLOBIN STRUCTURE, <i>E. R.</i> <i>Huehns</i>	157
<i>Mycoplasmas</i> AS INFECTIOUS AGENTS, <i>Lewis Thomas</i>	179
— HUMAN REAGINIC ANTIBODIES, <i>Kimishige Ishizaka</i>	187
TOXOPLASMOSIS: RECENT DEVELOPMENTS, <i>Jack S. Remington</i>	201
HUMAN INSULIN SECRETION: An Integrated Approach, <i>Daniel Porte,</i> <i>Jr. and John D. Bagdade</i>	219
SOME ENDOCRINE AND METABOLIC ASPECTS OF OBESITY, <i>David</i> <i>Rabinowitz</i>	241
HYPO-OSMOLAR SYNDROMES SECONDARY TO IMPAIRED WATER EX- CRETION, <i>Charles R. Kleeman</i>	259
EDEMA, <i>John R. Gill, Jr.</i>	269
— STRUCTURE AND FUNCTION OF MUCOSAL ANTIBODIES, <i>Thomas B.</i> <i>Tomasi, Jr.</i>	281
REGULATION OF THE SECRETIONS OF THE PANCREAS, <i>John Dupré</i>	299
CEREBRAL LIPIDOSES, <i>Roscoe O. Brady</i>	317
DIETARY TREATMENT OF INBORN ERRORS OF METABOLISM, <i>Neil A.</i> <i>Holtzman</i>	335
CRYSTAL-INDUCED INFLAMMATION OF THE JOINTS, <i>Daniel J. McCarty</i>	357
CHEMOTHERAPY OF MENTAL DEPRESSION, <i>Lucy Jane King</i>	367
— CHROMOSOMAL ABNORMALITIES IN HUMAN NEOPLASIA, <i>Avery A.</i> <i>Sandberg and Dieter K. Hossfeld</i>	379
HUMAN CHROMOSOME DAMAGE BY CHEMICAL AGENTS, <i>Margery W.</i> <i>Shaw</i>	409
L-ASPARAGINASE. <i>R. L. Capizzi, J. R. Bertino, and R. E. Handschu-</i> <i>macher</i>	433
Author Index	445
Subject Index	474
Cumulative Index of Contributing Authors, Volumes 17 to 21	496
Cumulative Index of Chapter Titles, Volumes 17 to 21	498

Annual Reviews, Inc., and the Editors of its publications assume no responsibility for the statements expressed by the contributors to this *Review*.



